

APPENDIX II – USER PROFILING

There are two types of users of the system and method of the present invention:

- **Users to Create and Manage Rich Content:** The “Define User Groups” and “Define Users” functions enable maintenance of this type of user. These users use the various available functions of present invention to create and manage rich content, i.e., CLG, Maintenance, Publishing etc. These users comprise Data Aggregators, Material Experts, Quality Assurance Personnel, Administrators, Approvers, etc.
- Individual user groups access selected projects and selected user functions. An individual user is associated with a user group. The present invention site map for a user is generated based on the user’s profile, i.e., authorizations defined for the user group to which the user belongs. This restricts a user to perform only those functions for which the user has authorization.
- **Shoppers who will browse published catalogs and purchase items:** The “Define User Groups” and “Define User” functions enable maintenance of this type of user. The users that are members of a User Group that has Navigator as an authorized function are shoppers. The shoppers browse published catalogs using the Catalog Browser Web Application and purchase available items.
- A user (shopper) is associated with a user group. This enables similar shoppers to be grouped together. The user group is associated with different product views for distinct catalogs. A shopper is presented the product view associated with the user group for the selected catalog.
- A shopper is not allowed to access any other functions of the present invention except Catalog Browser Web Application unless configured in the User Group. A log-on screen is available for shoppers. This log-on screen enables the shopper to specify the catalog, the user id and password. On submitting this information, the shopper is presented the Catalog Browser Web Application.

APPENDIX III – WORK PROCESS MANAGMENT

ContentPlus - Work Process Management User's Guide

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ContentPlus – Work Process Management User's Guide

1 Introduction

1.1 Welcome to ContentPlus

ContentPlus, is a robust, easy-to-use rich content creation and management application that provides users with the ability to:

- ☐ Create a standard rich content database with referencing schema of classification.
- ☐ Maintain classification schema and items by addition, modification or deletion.
- ☐ Import classification schema and rich content data from different sources.
- ☐ Optimize Content and Product Views based on User Profiles and Shopper Groups.
- ☐ Manage Access Authorization and Security Levels for application and database.

1.2 System Requirements

ContentPlus is a web-based, browser-independent application. As a web-based application, ContentPlus requires the Java Runtime Environment (JRE), a standard browser and access to the Internet.

As a browser-independent application, ContentPlus can be accessed with a variety of standard browsers, including Microsoft Internet Explorer and Netscape Navigator. The following are the software and hardware requirements for using ContentPlus.

Software Requirements

- ☐ Java Runtime Environment v 1.4.0 or higher
- ☐ Internet Explorer v. 5.5 or higher
- OR-
- ☐ Netscape Navigator v. 6.0 or higher

Hardware Requirements

- ☐ 800 x 600 pixels screen resolution

1.3 Contacting ePlus Content Services, Inc.

Refer to the following sections for information about contacting ePlus, inc. for customer support or sales information.

1.3.1 ePlus, Inc. Headquarters

ePlus, inc. is a leading provider of supply chain management solutions. From integrated financial services, to an end-to-end, web-based procurement

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application, to a comprehensive, web-based asset management application, to unparalleled client services, ePlus, inc. provides its rapidly growing customer base complete supply chain management solutions.

Corporate Headquarters

Address

ePlus, inc.
400 Herndon Parkway
Herndon, VA 20170

Telephone

1-703-264-0770

-or-

1-800-827-5711

Office Hours

Monday to Friday

9:00 A.M. to 5:30 P.M. Eastern Standard Time

2 Getting Started

2.1 Logging into ContentPlus

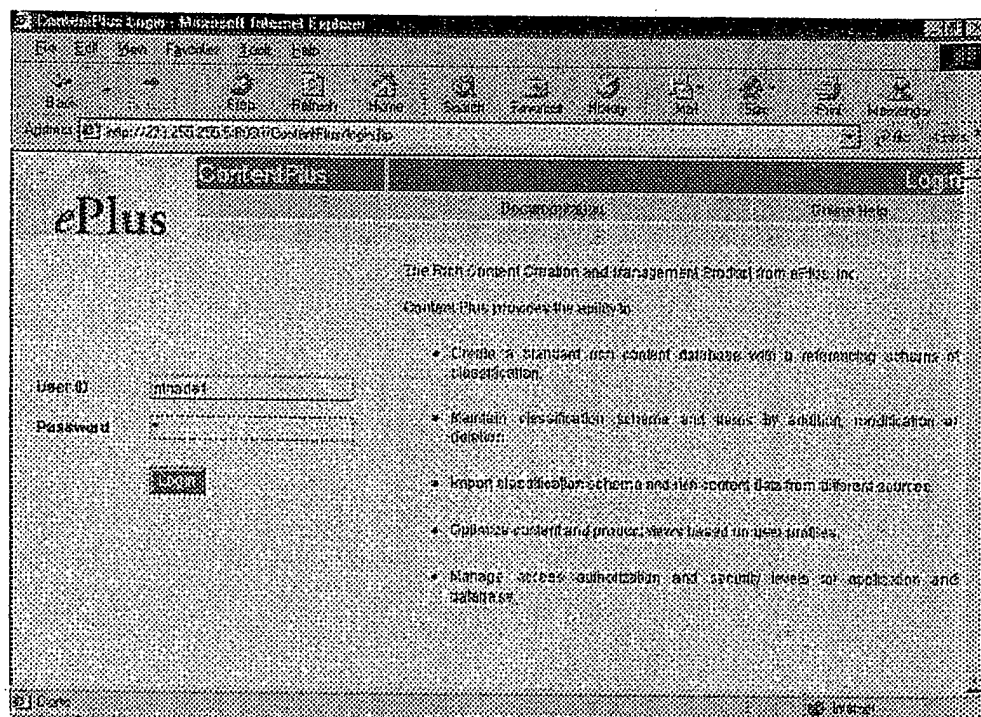
Your ContentPlus System Administrator provides you the Uniform Resource Locator (URL) of your organization's ContentPlus site along with your ContentPlus login name and password.

Your login information is used to verify your access permissions and to control the functions you can see and perform in ContentPlus.

Logging into ContentPlus is easy. After you access the ContentPlus Login page, simply enter your login name and password.

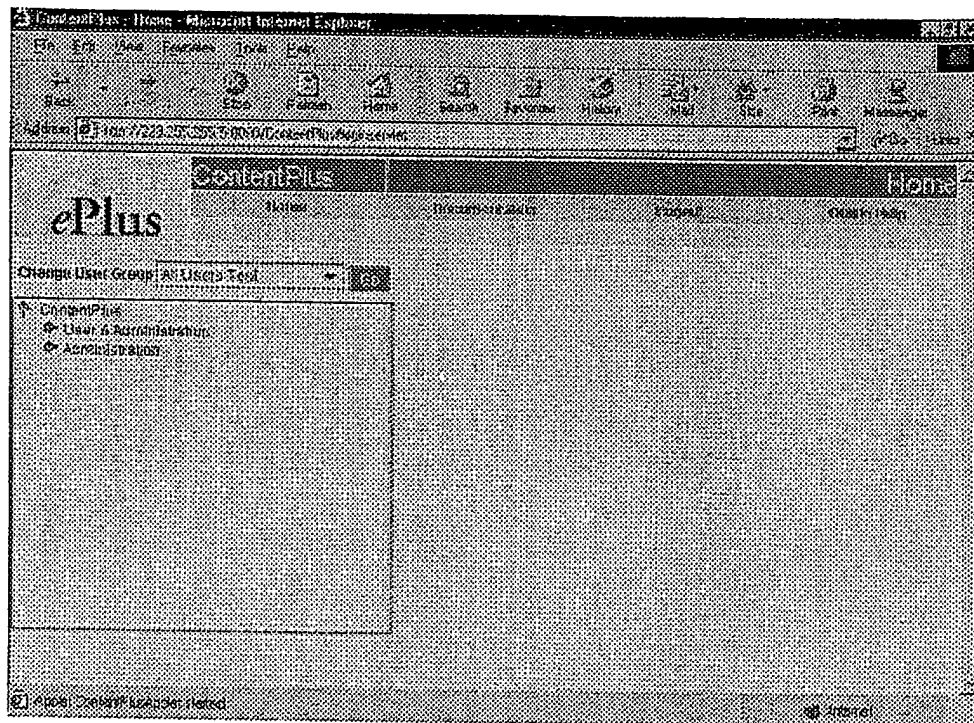
2.1.1 Logging into ContentPlus Site

1. Launch your browser software, and type the URL of your organization's ContentPlus site. The ContentPlus login page for your organizations' site appears.



2. From the ContentPlus login page, in the **User ID** field, enter your ContentPlus site user id.
3. Similarly, in the **Password** field, enter your site password. The password will be encrypted and therefore it will show as asterisk '*'.

4. Click on the **Login** button. The ContentPlus home page, which is the central screen of ContentPlus appears.



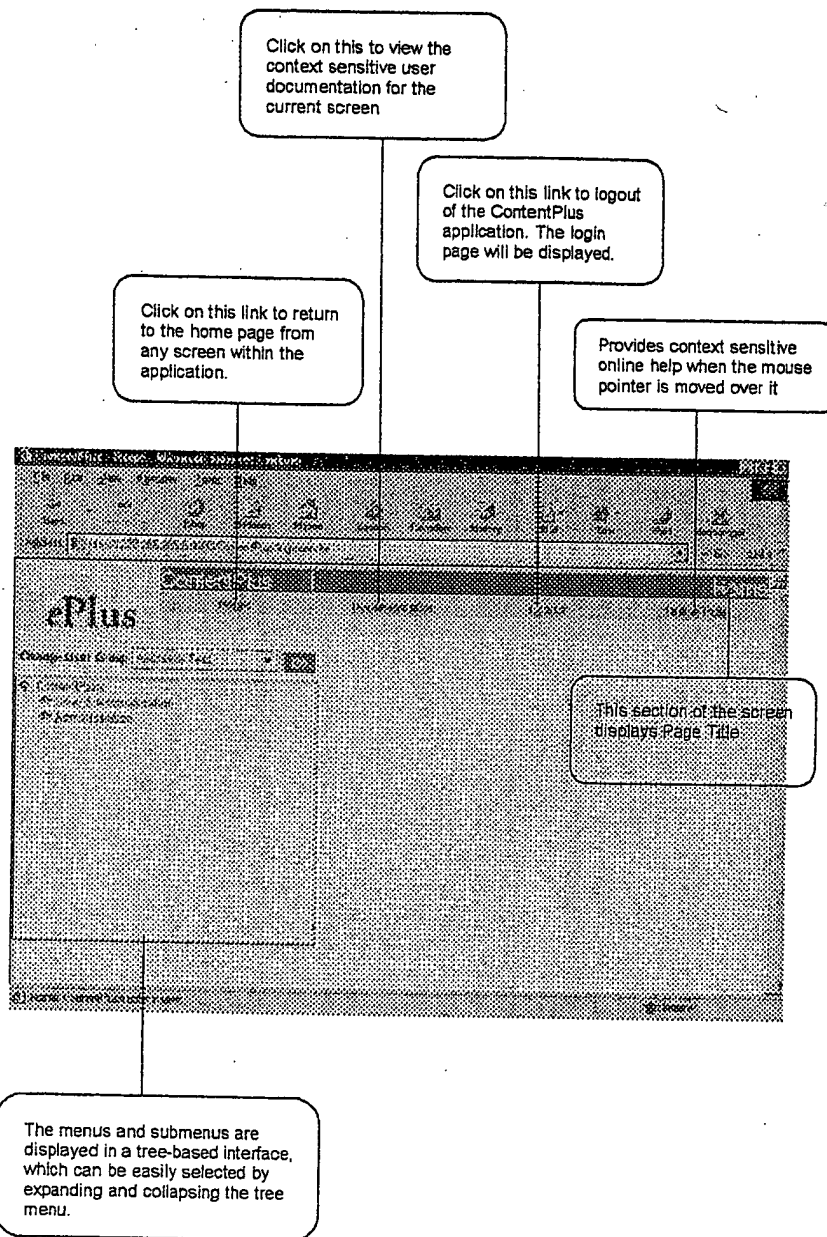
2.1.2 The ContentPlus Home Page

Logging into the ContentPlus site displays the ContentPlus home page. The home page provides access to a range of functions available in the application.

Note: The navigation button viz. Back, Forward, Refresh, Home etc. present on the browser's toolbar must not be used for navigation. Always ensure that the navigation buttons provided on the application interface are used to navigate within the application.

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3 Work Process Management

The CLG process consists of multiple successive activities: Schema Definition, Item Classification, Pattern Building, Value-extraction and Quality Assurance. The CLG process also covers manual additions and modifications to items, definition of synonyms, definition of accessory information and association of items across different schemas.

A referencing schema of categories is defined for enabling classification of rich content items. These categories comprise classes and sub-classes in a parent-child relationship structure. Items are categorized within respective classes or subclasses based on their features or properties. These features/properties are called Attributes.

Incoming items are processed in stages in the ContentPlus. There are seven stages through which an item passes before it is available for publishing or syndication. These stages are:

- *Ready For Identification:* Incoming items are classified using automated or manual processes. The automated process matches incoming item descriptions with existing schema class attributes by using a pattern-recognition feature. The items are imported into matching schema classes and inherit the attributes of the respective parent classes.
- *Ready For Value Extraction:* Classified items are further processed to extract and populate attribute values using pattern-recognition features. Patterns are defined for both class attributes and attribute values and are stored in a pattern database.
- *Ready For Enrichment:* Value extracted items are further enriched by associating accessories, images & documents with it and associating the item with multiple schema classes. These items are then moved to the "Ready For QA" stage.
- *Ready For QA:* Quality Assurance procedures are performed on value-extracted and / or enriched items to identify and correct anomalies. These items are then approved and moved to the next stage.
- *Ready For Shipping:* Items that are approved by Quality Assurance process are flagged as "Ready For Shipping". These are then selected and shipped to the "Staging" data area so that they can be published, syndicated or maintained. The CLG and Maintenance functional areas operate on the same "Staging" data area.

3.1 Enhance Incoming Items

1. Select User & Administration → CLG Processing → Work Process Management → Enhance Incoming Items in the tree menu on the home page. The Enhance Incoming Items screen will be displayed as follows:

The screenshot shows the 'Enhance Incoming Items' screen. Callouts point to the following elements:

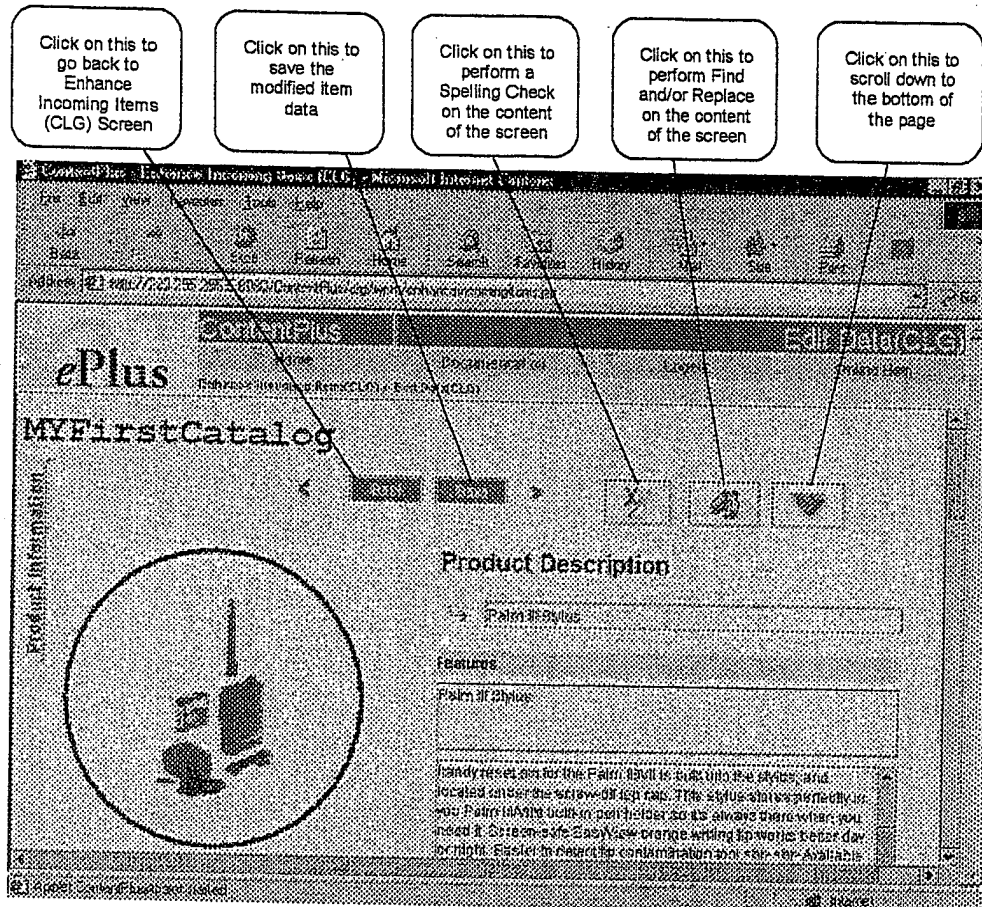
- Click on this to select all the records in the list:** Points to the 'Select All' button (checkbox icon).
- Click on this to remove the filter and display all the records in the list:** Points to the 'Clear Filter' button.
- Scroll to the specific record entered in the view field:** Points to the 'GO' button next to the 'View' field.
- List all records for the selected manufacturer:** Points to the 'Manufacturer' drop-down menu.
- Click on this to enhance item in Edit Data (CLG):** Points to the 'Edit Data' button.
- Click on this to return to home page:** Points to the 'Home' button.

The table below shows the data displayed on the screen:

Item ID	Item Description	View
155867	Bosch 718 Vario	GO
155868	Denso Tensardet Dual - 6PK1	GO
155869	Emerson 1238L - ATT	GO
155870	Emerson 1238L - ATT	GO
155871	Emerson 1238L - ATT	GO
155872	Emerson 1238L - ATT	GO
155873	Emerson 1238L - ATT	GO
155874	Emerson 1238L - ATT	GO

2. From the **Select Project** drop-down list, select the project. The list of items for the selected project will be displayed.
3. From the available Load Events, select the load event. The list of items for the selected load event will be displayed.
4. From the **Manufacturer** drop-down list, select a manufacturer and click on the **Go** button. The list of items for the selected manufacturer will be displayed.
5. You can enter a record number and click on the **GO** icon to go to the desired record for viewing and editing.

6. Click on the **Select All** icon to select all the items for editing. In case, the item list has been filtered then only the filtered list will be selected. Click again on the **Un Select All** to Unselect All the items in the list.
7. Click **Remove Filter** icon to remove and redisplay all items.
8. Click on the **Finish** button, it will return to home page.
9. Click on the **Edit Data** button for enhancing item details, Edit Data (CLG) screen will appear.



The screenshot shows a web browser window with the ContentPlus application. The address bar displays a URL. The page has a navigation bar with links like Home, Product/Item, Input, and Quantity. The main content area is titled 'Edit Data (G)' and contains a form with various fields for product information. The 'Edit Data (G)' button is located in the top right corner of the form area.

10. Click on the **Spell Check** icon if you wish to perform spelling check the contents of the page.
11. Click on the **Find & Replace** icon if you wish to Find and/or Replace text on the page.
12. In the **Product Description** field, modify the item description.
13. In the **Features** field, modify the item features.
14. In the **Manufacturer Part Number** field, change the manufacturer part number for the item.
15. In the **Supplier Name** field, modify the supplier name for the item.
16. In the **Supplier Part Number** field, modify the supplier part number for the item.
17. In the **Price Currency** field, modify the price currency for the item.
18. In the **Price** field, modify the item price.
19. In the **Cost Currency** field, modify the cost currency for the item.
20. In the **Cost** field, modify the item cost.
21. In the **Cost Unit of Measure** field, modify the cost unit of measure for the item.

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22. In the **Cost Packaging Quantity** field, modify the cost packaging quantity for the item.
23. In the **Effective Date** field, modify the effective date for the item.
24. In the **Expiry Date** field, modify the expiration date for the item.
25. In the **Shippable Packaging Quantity** field, modify the shippable packaging quantity for the item.
26. In the **Delivery Days** field, modify the maximum number of days within which the item will be delivered.
27. In the **Purchase Frequency** field, modify the purchase frequency for the item.
28. In the **UPC Code** field, modify the UPC code for the item.
29. In the **Upload Image** field, enter the path for the item image file to be uploaded. Click on **Browse Image** button to select the item image file from the appropriate location on the local system.
30. In the **Add Attachments** field, enter the path for the attachment file to be uploaded. Click on **Browse** button to select the file from appropriate location on the local system. If required, link an existing shared attachment with the item by clicking on the shared attachment icon and selecting an existing attachment from the shared attachment dialog box.
31. In the **Define Attributes** field, add attributes and values for the item.
32. Click on the **Down Arrow** icon to scroll to the bottom of the screen. Similarly click on the **Up Arrow** icon to scroll to the top of the screen.
33. Click **Left Arrow** and **Right Arrow** icon to scroll the next and previous item.
34. Click on the **Save** button to save the modified item information.
35. Click on the **Back** button, it will return to Enhance Incoming Items (CLG) screen.

3.2 Manage Global Patterns

1. Select User & Administration → CLG Processing → Work Process Management → Manage Global Patterns in the tree menu on the home page. The Manage Global Patterns screen will be displayed as follows:

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Click on this to unselect all the records in the list

ContentPlus Manage Global Patterns (CLG) - Microsoft Internet Explorer

Address: http://207.230.11.100/ContentPlus/ManageGlobalPatterns.cfm

ContentPlus Manage Global Patterns (CLG)

View: ☐ All ☐ Go

Select	Status	Pattern ID	Article	Item Name	Comments
<input checked="" type="checkbox"/>	Pending	1	Manufacturer Pat	Patent	Patent

Approve Add More Save Delete Home

Click on this to approve pending global patterns

Click on this to add a new global pattern.

Click on this to save the new global patterns

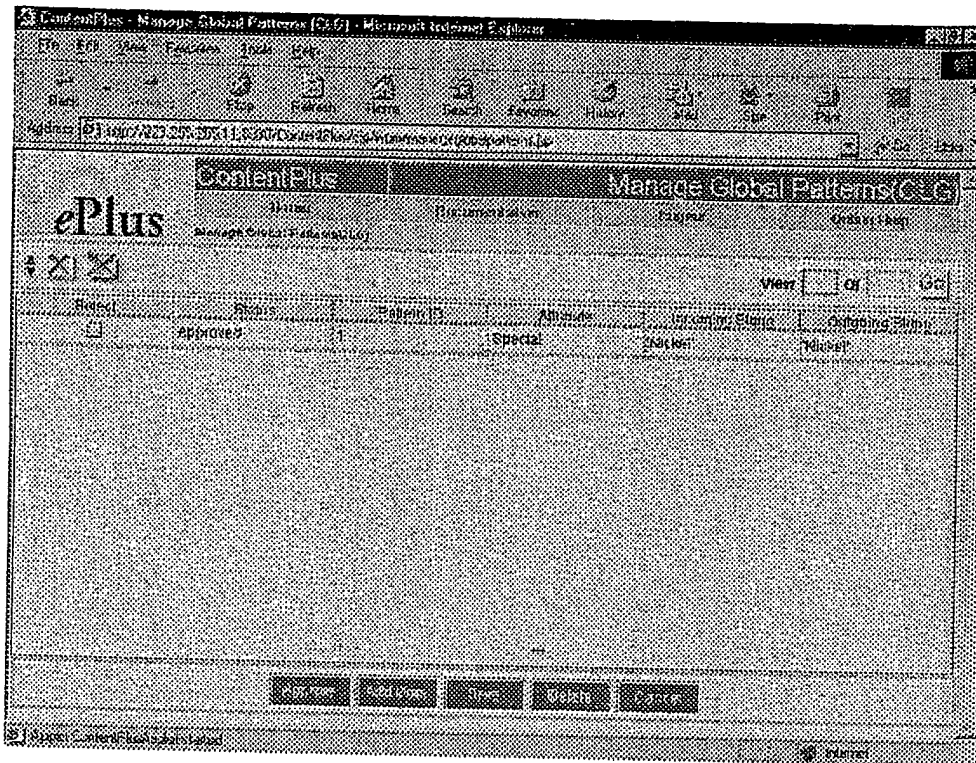
Click on this to delete the selected global patterns

Click on this to return to the home page

2. Select the Global Pattern record from the list by selecting the appropriate checkbox.
3. Click on the **Add More** button, to add a new global pattern, which will have an "Approved" status by default.
4. Click on the **Save** button, to save the new global pattern added to the list.
5. Click on **Delete** button, to delete the selected global pattern.

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6. Click on the **Approve** button, to approve pending global patterns.
7. Click on the **Cancel** button, to return to the home page.

3.3 Processing Grid (Using Input Grid)

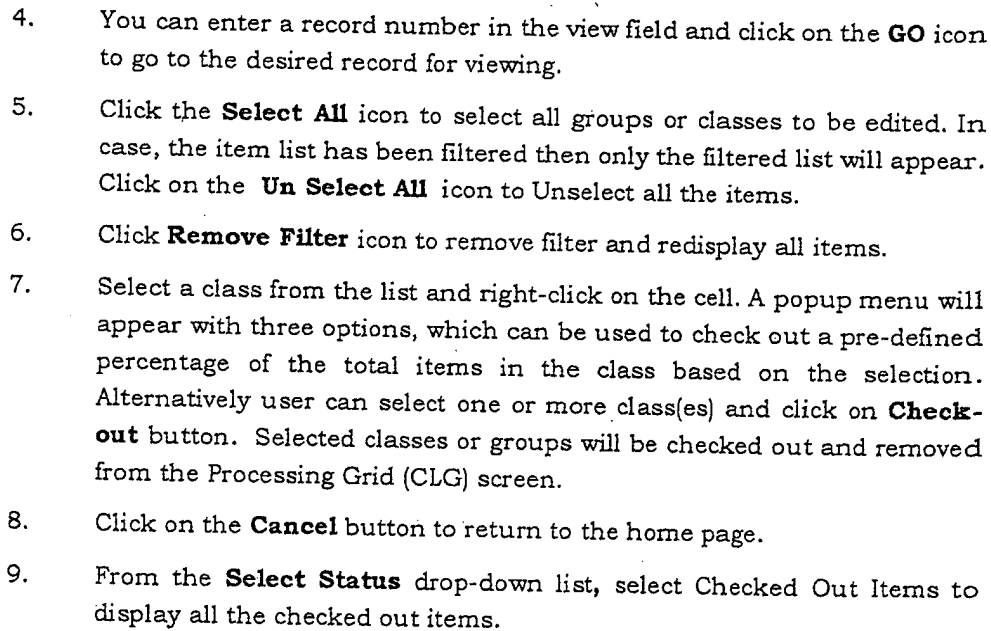
1. Select User & Administration → CLG Processing → Work Process Management → Processing Grid in the tree menu on the home page. The Processing Grid screen will be displayed as follows:

The screenshot displays the ePlus Processing Grid (CLG) screen. At the top, there are tabs for 'ePlus', 'Administration', 'Class', and 'Inventory'. Below the tabs, there are two dropdown menus: 'Select Project' (set to 'MyFirstCatalog') and 'Select Status' (set to 'Ready For Identification'). A 'View' button is also present. The main area contains a table with the following data:

ClassID	ClassName	Count	ClassID	ClassName	Count	ClassID	ClassName	Count
630131	MyFirstCatalog 04	1	630131	MyFirstCatalog 10	1	630131	MyFirstCatalog 12	1
74200	Recognized 1	1	74200	Recognized 02	1	630131	MyFirstCatalog 6	1
630131	MyFirstCatalog 21	1	630131	MyFirstCatalog 27	1	630131	MyFirstCatalog 1	1
630131	MyFirstCatalog 21	1						

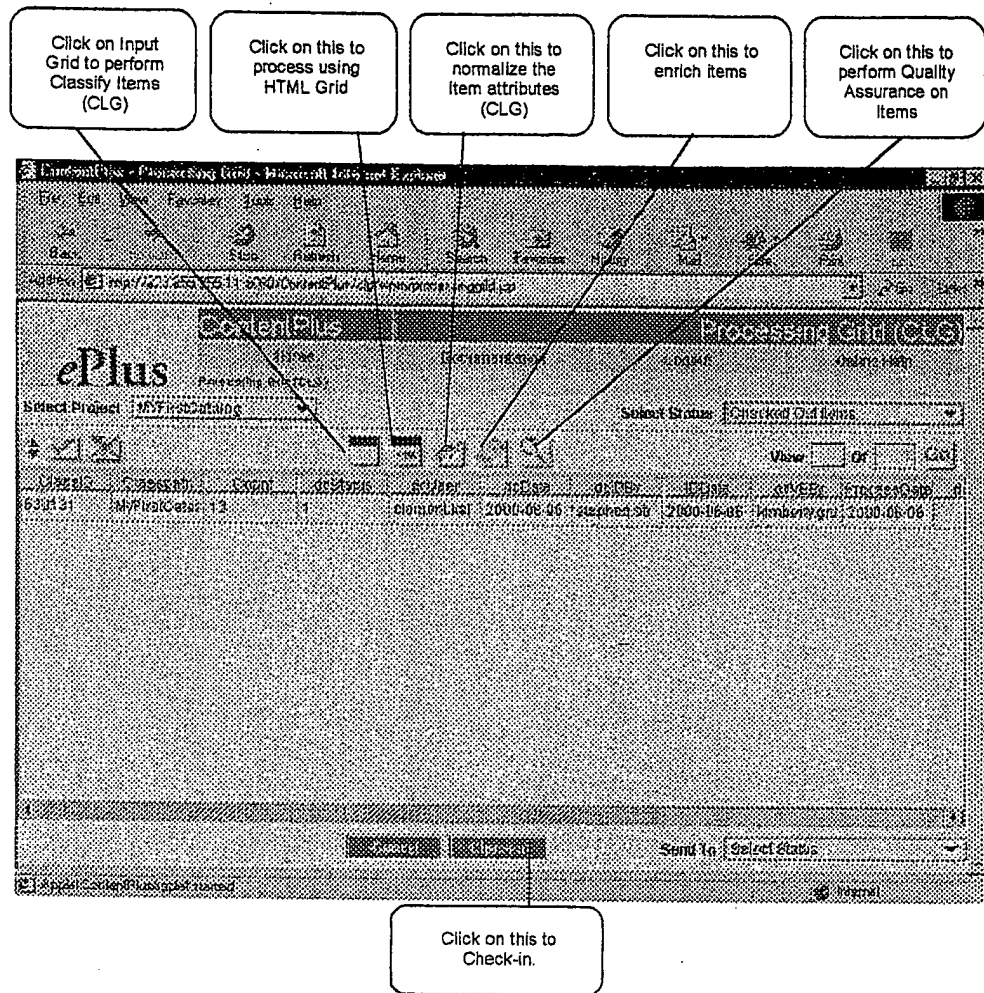
At the bottom of the table, there are buttons for 'Check Out' and 'Check In'. A callout box with a pointer to the table contains the text: 'Click on this to check-out selected classes or groups from the processing grid (CLG)'.

2. From the **Select Project** drop-down list, select the project.
3. From the **Select Status** drop-down list, select the status Ready For Identification (default is Checked Out Item). This will show a list of class(es) along with the item counts for the selected project and the selected status.



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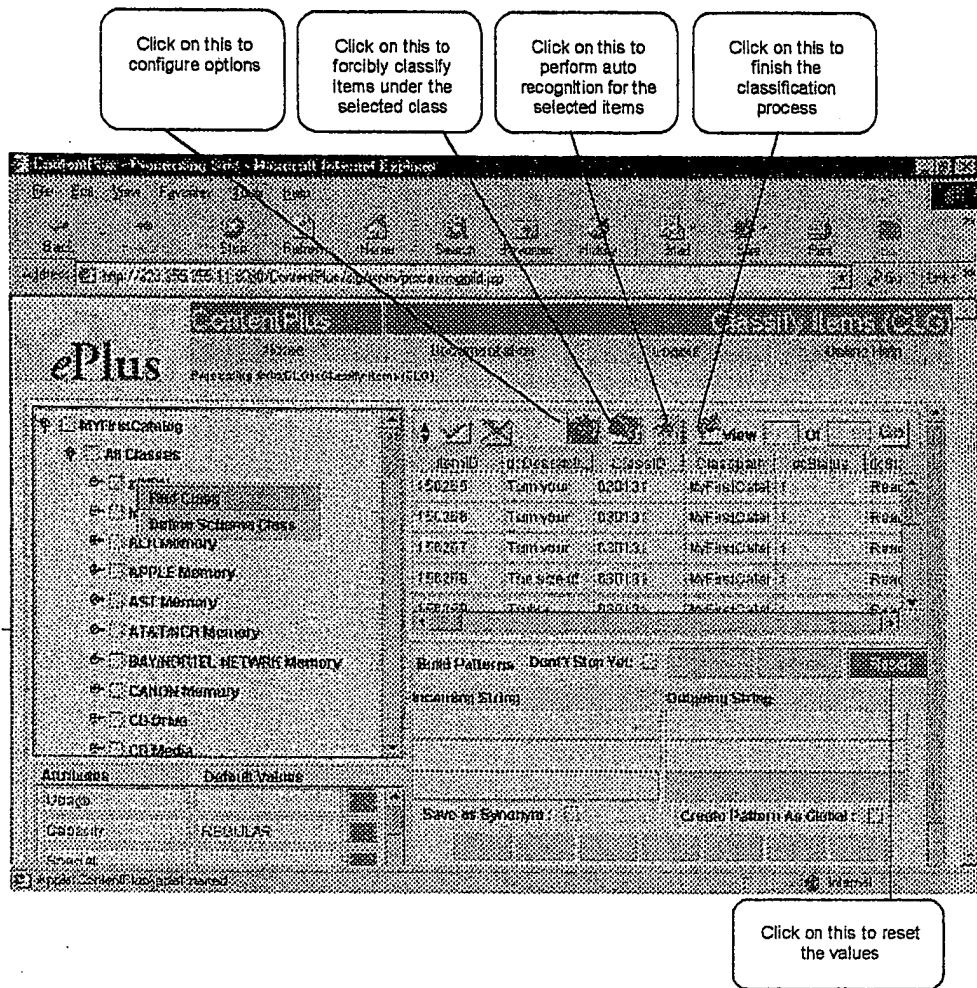
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10. Click on **Check-In** button, to send the item to the previous stage. Similarly, you can send an item to the next or the previous stage by selecting the appropriate stage from the **Send To** drop-down list. Click on the **Cancel** button to return to the home page.
11. Select the class(es) from the list and click on the **Input Grid** icon, the Classify Item(CLG) screen will appear.

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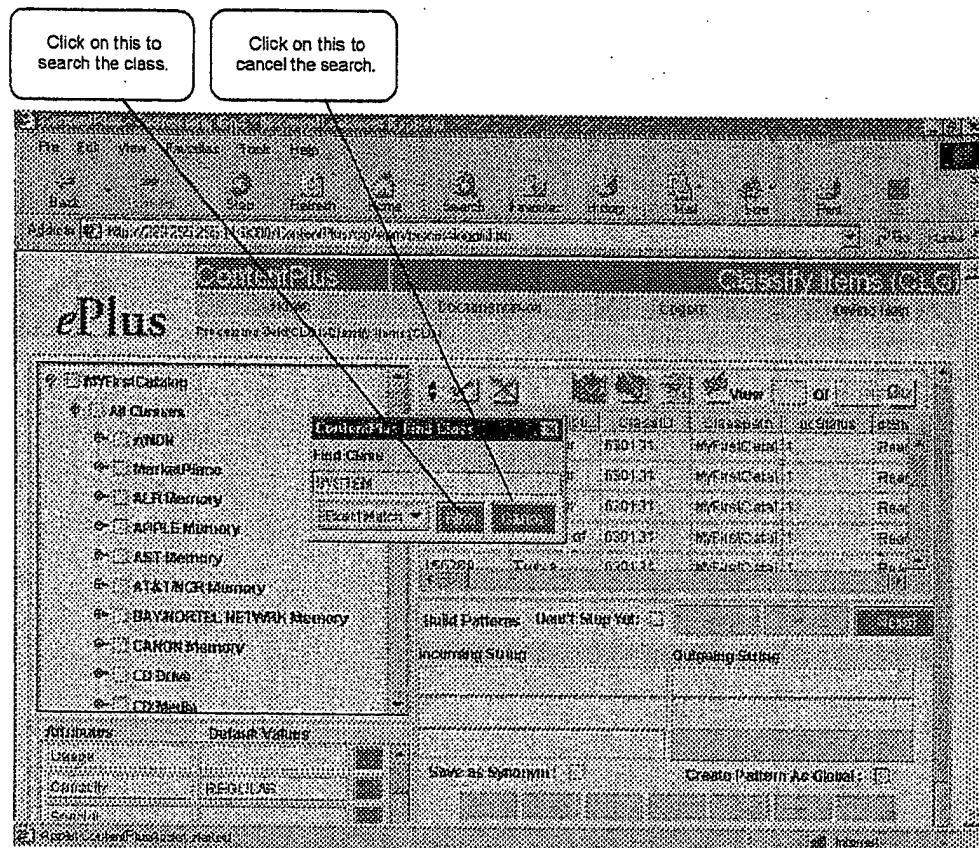
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12. If you need to search a particular class to associate an item with this class, click on a class in the left pane, right click on it and select the Find Class option from the resulting right-click menu. The Find Class dialog box will appear. This option can be executed if the exact class path for the required class is not known.

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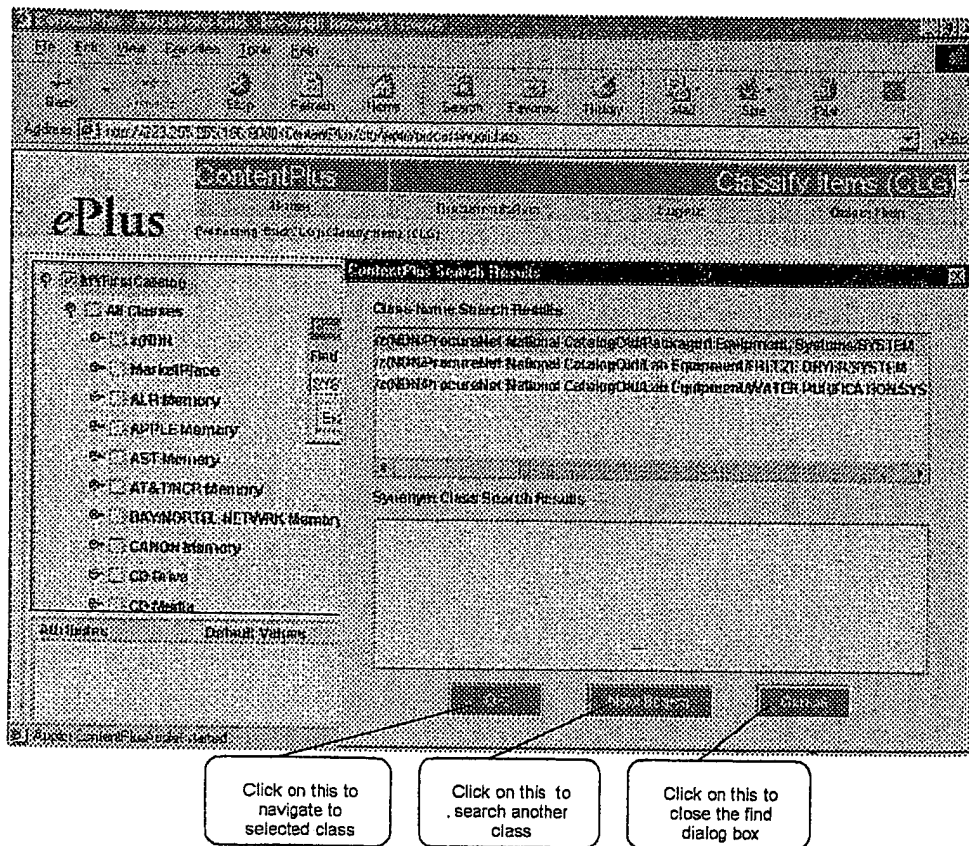


13. In the **Find Class** field, enter the class name for search. From the drop-down list select either **Any Word** or **Exact Match** option depending on the method for searching.
14. Click on **Find** button, the Class Name Search Results dialog box will appear. The dialog box will show the full class path under which the searched class was found.

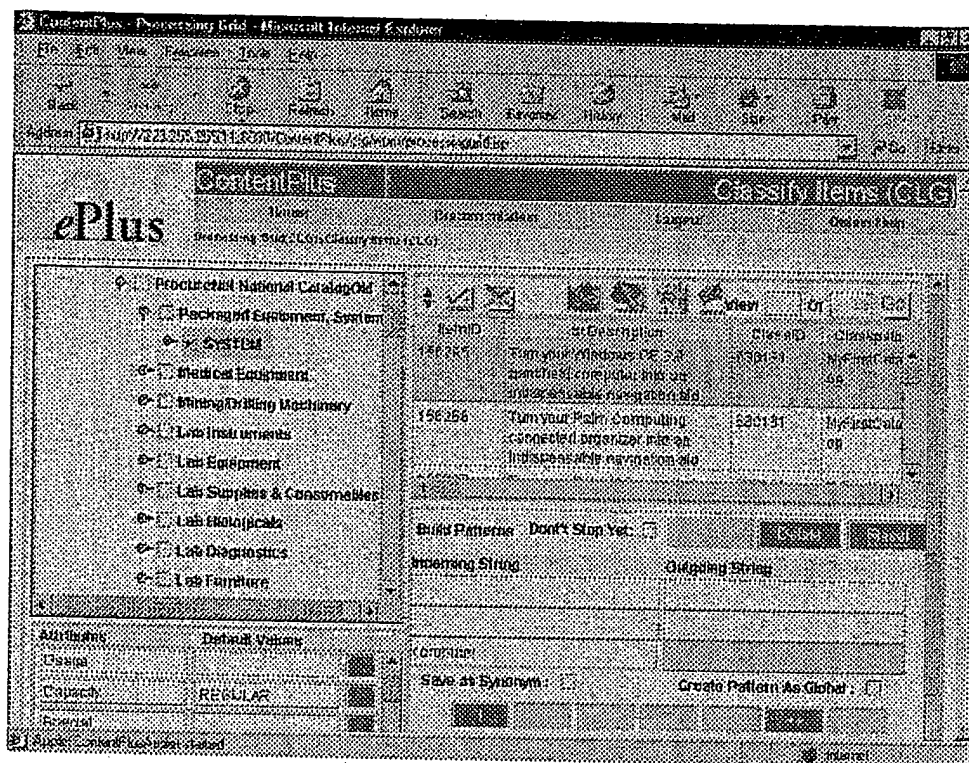
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15. Click on the class name you want to select and then click on **OK** button to close the dialog box. Click on **Cancel** button to exit from the search result window and return to Classify Items screen. If a new search is to be executed with a different search criteria then click on **New Search** button.



Select All Records in the list. The Unselect All icon will be displayed.



Remove filtering to display all the records.



Configure options to be used during classification and value extraction.



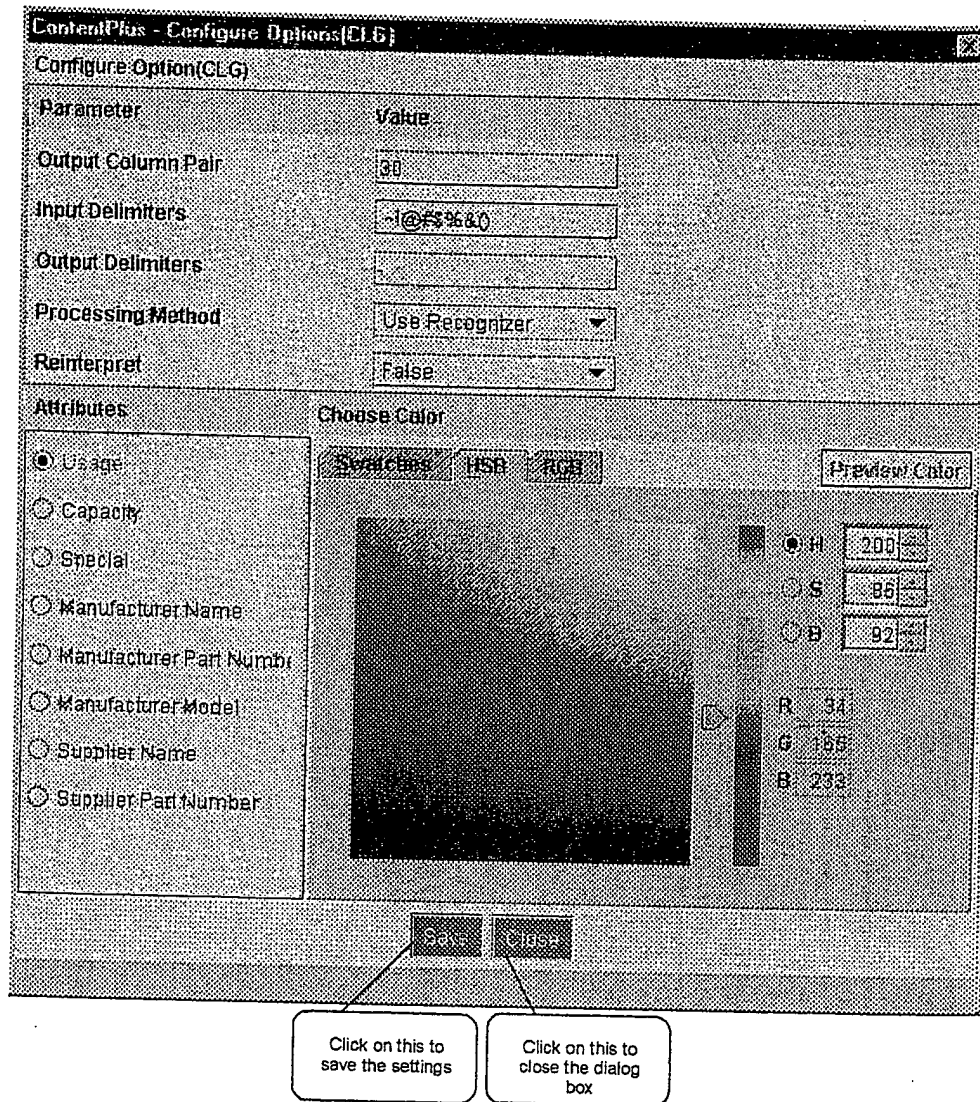
Forcibly classify selected items under the selected class



Perform auto recognition for the selected items



Finish the classification process

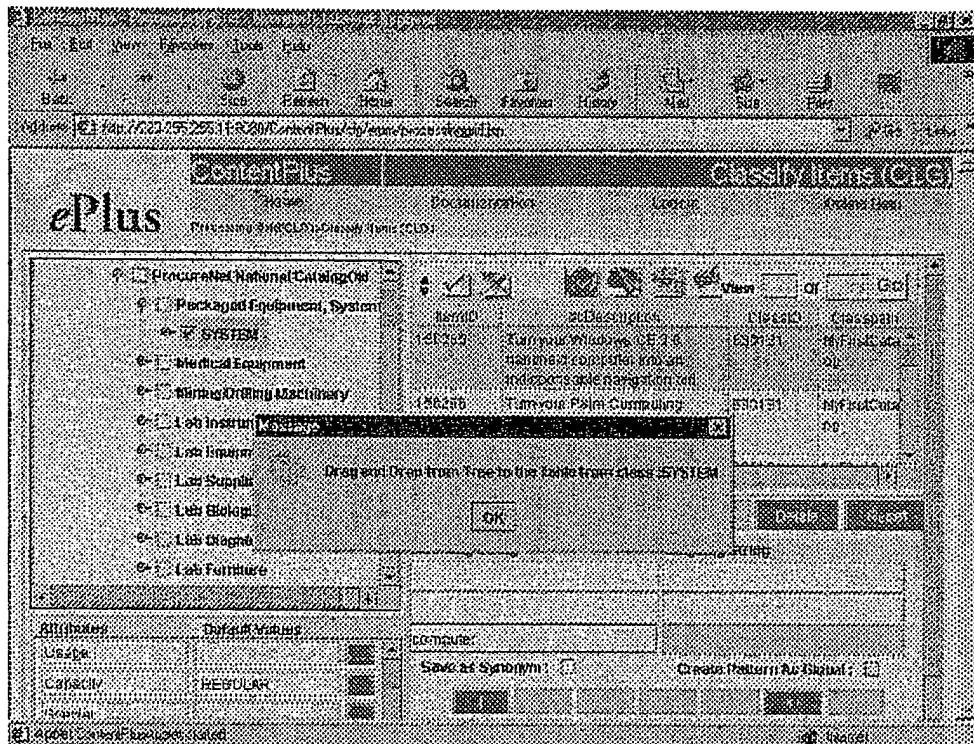


16. Click the **Configure Option** icon, to configure options for the current user. The Configure Options dialog box will appear.
17. In the **Output Column Pair** field, enter a numeric value indicating maximum number of class attribute fields to be updated. The maximum limit is 30.
18. In the **Input Delimiters** field, enter delimiting characters that are present in the "dcDescription" field. The classification and value extraction is influenced by the input delimiters defined.
19. In the **Output Delimiters** field, enter a delimiting character that will be used in the produced "NETCProductDescription" field.

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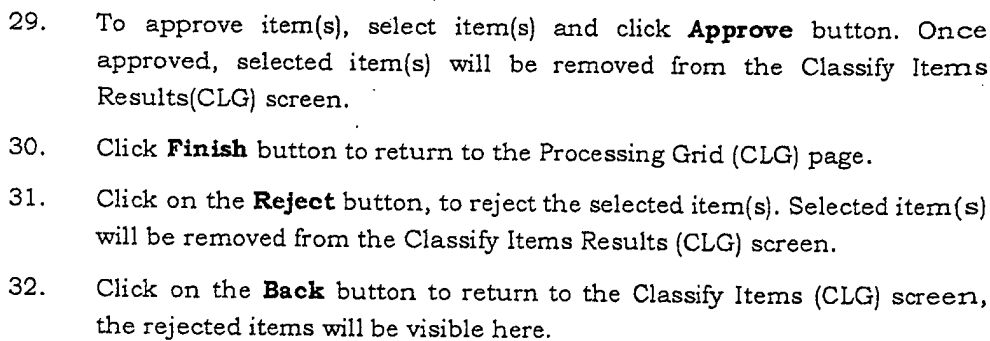
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20. From the **Processing Method** drop-down list, select the Use Recognizer option to perform auto classification using the **Interpret** option, or select the Use Class Column option to retain the existing classification.
21. From the **Reinterpret** drop-down list, select the True option to reinterpret the last classification when patterns are saved or deleted. The last classification will not be reinterpreted if the False option is selected.
22. Select each attribute and the corresponding color using the color chooser tab pages and available options. Click on the **Save** button to save the settings. Click on **Close** button to close the dialog box.



23. Clicking on any class will display its class specific attributes.
24. Click on the Select Attributes button, the Select Attribute dialog box will appear. Define attribute values for the required class attributes by double clicking on the respective attribute value in the dialog box.
25. In the Select Attribute dialog box, click on the **Edit** button to edit or add attribute values. Click on the **Save** button to save the changes. Click on the **Close** button to close the dialog box.
26. To classify items, select a class and select the items to be assigned to it, and drag and drop the class from the tree onto the selected items. Alternatively, manual classification can be performed by selecting a class,

27. Click the **Finish** icon on this page to complete the classification operation and return to the Classify Items Result (CLG).
28. Click on the **Back** button to return to the Processing Grid (CLG) screen.

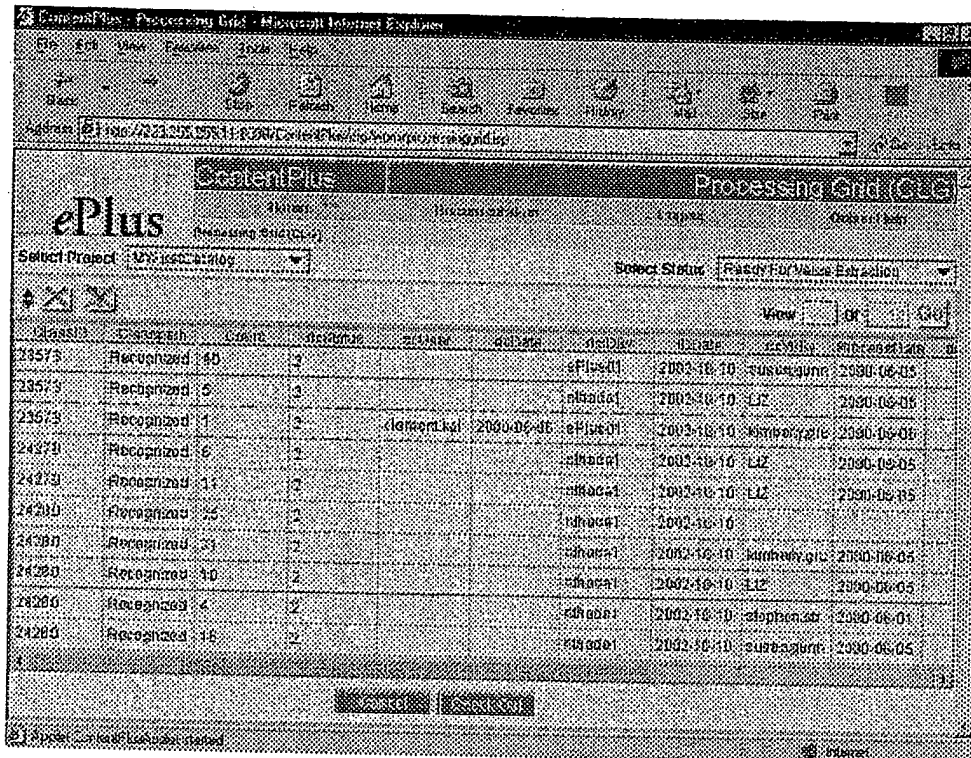


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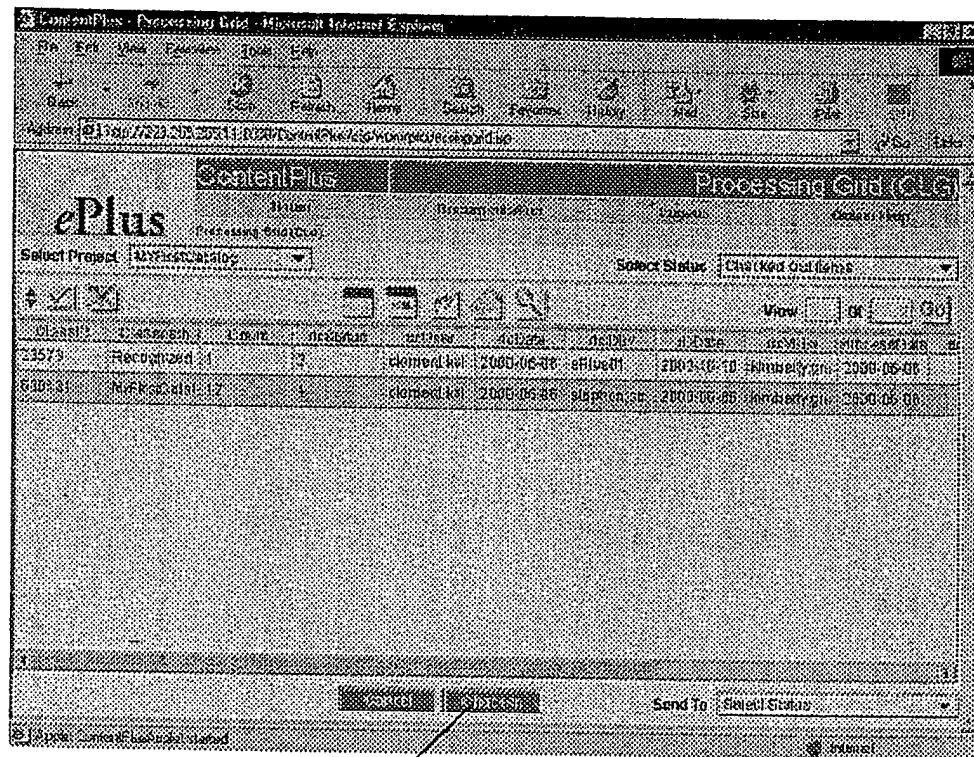
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Class	Status	Count	Duration	Action	Date
23573	Recognized	40	3		2002-10-10
23573	Recognized	5	3		2002-10-10
23573	Recognized	1	1	elemental	2000-06-01
24370	Recognized	6	1		2002-10-10
24370	Recognized	11	2		2002-10-10
24380	Recognized	25	2		2002-10-10
24380	Recognized	24	2		2002-10-10
24380	Recognized	10	2		2002-10-10
24380	Recognized	4	2		2002-10-10
24380	Recognized	15	2		2002-10-10

33. From the **Select Status** drop-down list, select the status Ready For Value Extraction. This will show a list of class(es) for the selected project which are Ready for Value Extraction.

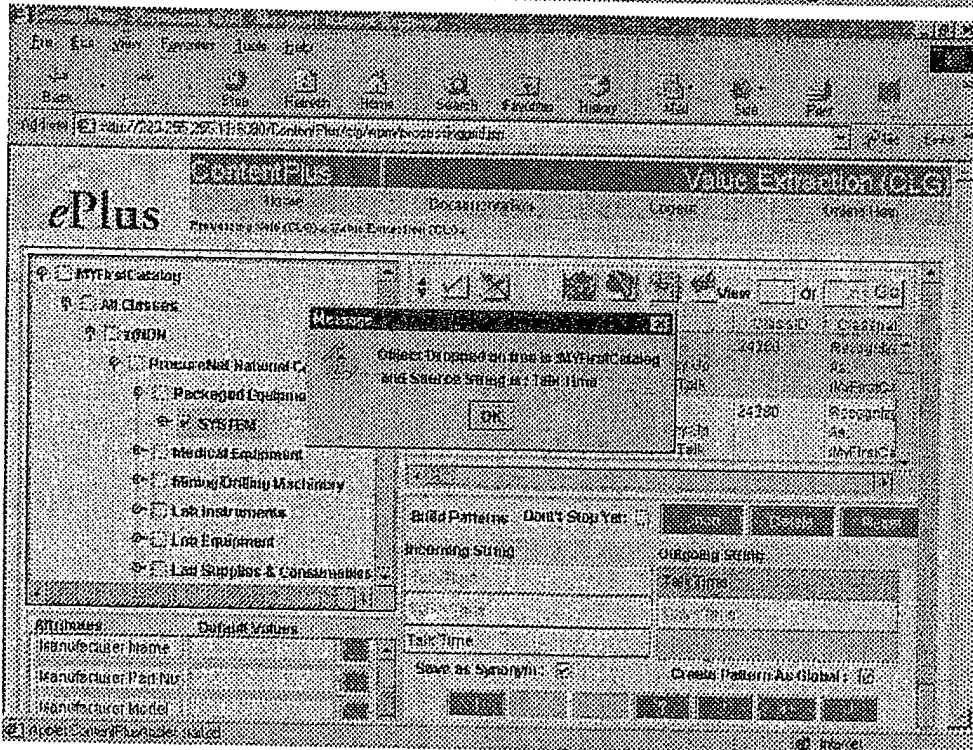
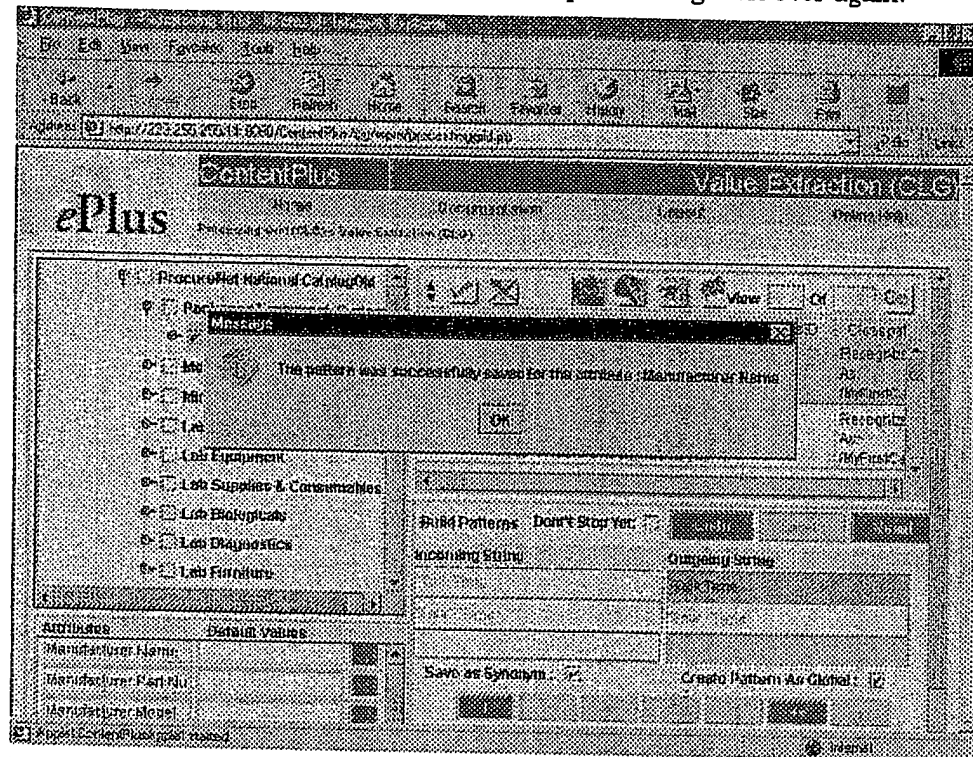


34. Select the required class(es) and click on the **Check-out** button. Selected classes or groups will be checked out and removed from the Processing Grid (CLG) screen.
35. Click on the **Cancel** button to return to the home page.
36. From the **Select Status** drop-down list, select Checked Out Items to display all the checked out items. Click on the Input Grid icon to proceed to the Value Extraction (CLG) screen.





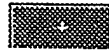




37. To build a pattern, select text from the "dcDescription" column or type in the description in the Incoming String field. Selected text will appear automatically in the **Incoming String** field. Using the pattern builder buttons build the required patterns.
38. Associate a pre-built pattern to an attribute by dragging and dropping the pattern onto the class specific attribute. Similarly, associate a pre-built pattern to a class by dragging and dropping the pattern onto any class in the schema tree.
39. Select the **Save the Synonym** checkbox, to save the pattern as a synonym.
40. Select the **Create Pattern As Global** checkbox, to create a global pattern which can be managed through Manage Global Patterns screen.
41. Select the **Don't Stop Yet** checkbox, if you want to continue pattern matching with other patterns.
42. Click the **Undo** button, to undo the last pattern building action.
43. Click **Delete** button, to delete the last pattern saved.

44. Click **Reset** button, to reset the build pattern begin all over again.

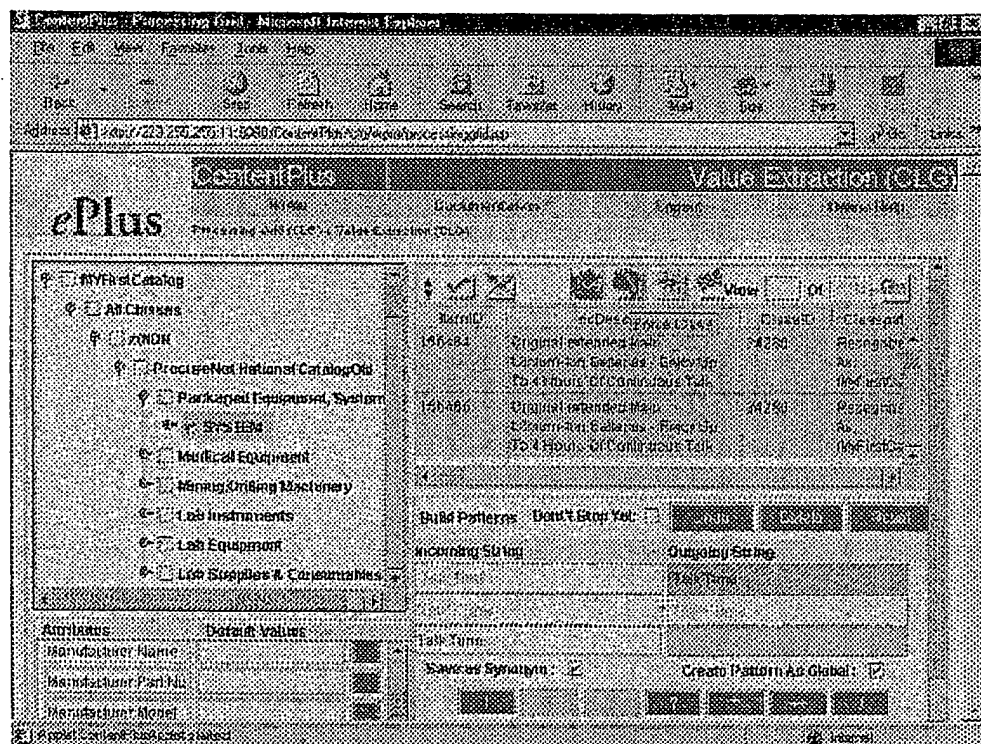


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-  Build a literal pattern for input string
-  Build a literal pattern, consisting of the complete selected text
-  Append a space to the current pattern
-  Build a numeric pattern, for input string
-  Build the pattern string, comprising of a wildcard character at the specified position
-  Build the pattern string, comprising of a wildcard characters starting from the specified position
-  Split the pattern at the current cursor position

45. Click on the **Back** button to return to the Processing Grid (CLG) screen.
46. In order to perform value extraction, select item(s) from the item list and click **Force Class** icon or the **Interpret** icon. The selected items will undergo value extraction and removed from the list.



47. Click **Finish** button to return to the Classify Items Results (CLG) page.

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File Edit View Favorites Tools Help

Address: http://223.255.255.11:8080/ContentPlus/ProcessingGrid.jsp

ContentPlus Classify Items Result (CLG)

Processing Grid (CLG) - Classify Items (CLG) - Classify Items Result (CLG)

View: [List] [Grid] [Grid]

Item ID	Item Name	Classify Item	Classify Item	Classify Item	Classify Item	Classify Item	Classify Item	Classify Item
100001	Original	23573	Recognized	2	Ready For Value Extraction	nm1001	2002-10-10	kimberly.gru
100002	Original	23573	Recognized	2	Ready For Value Extraction	nm1001	2002-10-10	kimberly.gru
100003	Original	23573	Recognized	2	Ready For Value Extraction	nm1001	2002-10-10	kimberly.gru
100004	Original	23573	Recognized	2	Ready For Value Extraction	nm1001	2002-10-10	kimberly.gru
100005	Original	23573	Recognized	2	Ready For Value Extraction	nm1001	2002-10-10	kimberly.gru
100006	Original	23573	Recognized	2	Ready For Value Extraction	nm1001	2002-10-10	kimberly.gru
100007	Original	23573	Recognized	2	Ready For Value Extraction	nm1001	2002-10-10	kimberly.gru
100008	Original	23573	Recognized	2	Ready For Value Extraction	nm1001	2002-10-10	kimberly.gru
100009	Original	23573	Recognized	2	Ready For Value Extraction	nm1001	2002-10-10	kimberly.gru
100010	Original	23573	Recognized	2	Ready For Value Extraction	nm1001	2002-10-10	kimberly.gru
100011	Original	23573	Recognized	2	Ready For Value Extraction	nm1001	2002-10-10	kimberly.gru
100012	Original	23573	Recognized	2	Ready For Value Extraction	nm1001	2002-10-10	kimberly.gru
100013	Original	23573	Recognized	2	Ready For Value Extraction	nm1001	2002-10-10	kimberly.gru
100014	Original	23573	Recognized	2	Ready For Value Extraction	nm1001	2002-10-10	kimberly.gru

Buttons: [Back] [Forward] [Stop] [Refresh] [Print] [Export] [Import] [Delete] [Add] [Edit] [Cancel] [OK] [Apply] [Help]

Status: ContentPlus has been started.

ContentPlus - Processing Grid - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Address: http://223.255.255.11:8080/ContentPlus/ProcessingGrid.jsp

ContentPlus Classify Items Result (CLG)

Processing Grid (CLG) - Classify Items (CLG) - Classify Items Result (CLG)

View: [List] [Grid] [Grid]

Item ID	Item Name	Classify Item	Classify Item	Classify Item	Classify Item	Classify Item	Classify Item	Classify Item
100001	Special	100001	Manufacture	100	Manufacture	100	Supplier	100
100002	Special	100002	Manufacture	100	Manufacture	100	Supplier	100
100003	Special	100003	Manufacture	100	Manufacture	100	Supplier	100
100004	Special	100004	Manufacture	100	Manufacture	100	Supplier	100
100005	Special	100005	Manufacture	100	Manufacture	100	Supplier	100
100006	Special	100006	Manufacture	100	Manufacture	100	Supplier	100
100007	Special	100007	Manufacture	100	Manufacture	100	Supplier	100
100008	Special	100008	Manufacture	100	Manufacture	100	Supplier	100
100009	Special	100009	Manufacture	100	Manufacture	100	Supplier	100
100010	Special	100010	Manufacture	100	Manufacture	100	Supplier	100
100011	Special	100011	Manufacture	100	Manufacture	100	Supplier	100
100012	Special	100012	Manufacture	100	Manufacture	100	Supplier	100
100013	Special	100013	Manufacture	100	Manufacture	100	Supplier	100
100014	Special	100014	Manufacture	100	Manufacture	100	Supplier	100

Buttons: [Back] [Forward] [Stop] [Refresh] [Print] [Export] [Import] [Delete] [Add] [Edit] [Cancel] [OK] [Apply] [Help]

Status: ContentPlus has been started.

The screenshot shows the ContentPlus software interface. At the top, there's a menu bar with options like File, Edit, View, Format, Tools, and Help. Below the menu bar is a toolbar with various icons for file operations. The main window displays a list of items with the following columns: ID, Name, Class ID, Class Path, Item, Author, and Date. The list contains 10 items, all with Class ID 21573 and Author Kimberly G. The items are numbered 1 through 10, and their names are: 1. 150454, 2. 150455, 3. 150456, 4. 150457, 5. 150458, 6. 150459, 7. 150460, 8. 150461, 9. 150462, and 10. 150463. The interface also includes a search bar at the top left and a status bar at the bottom.

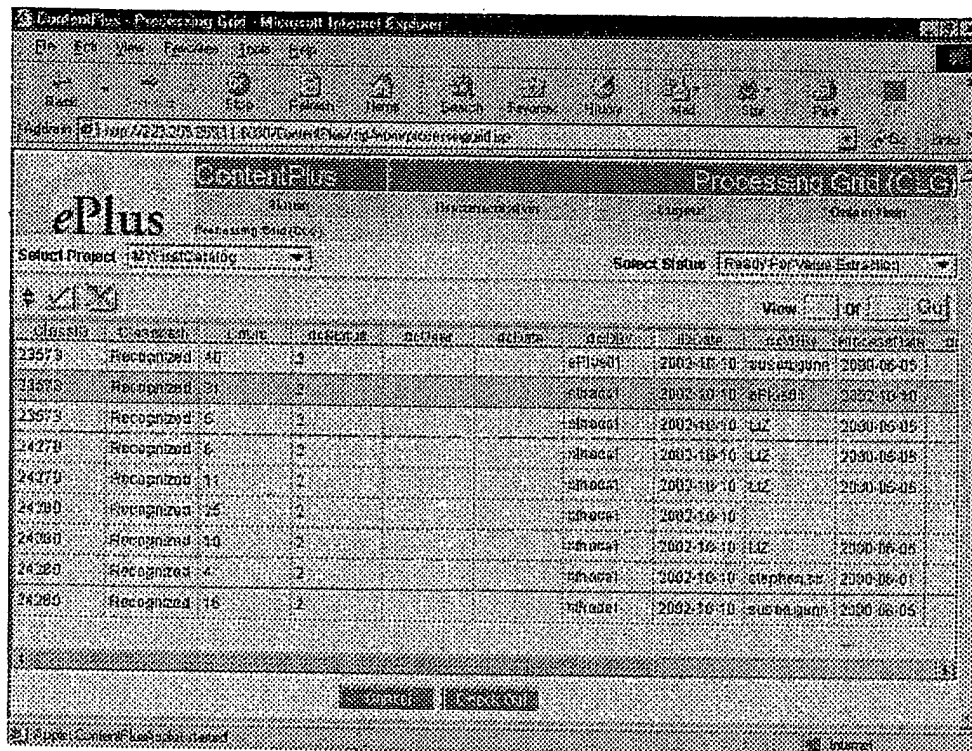
ID	Name	Class ID	Class Path	Item	Author	Date
150454	Original	21573	Ready for Value	Ready for Value Extension	Kimberly G.	2002-10-10
150455	Original	21573	Ready for Value	Ready for Value Extension	Kimberly G.	2002-10-10
150456	Original	21573	Ready for Value	Ready for Value Extension	Kimberly G.	2002-10-10
150457	Original	21573	Ready for Value	Ready for Value Extension	Kimberly G.	2002-10-10
150458	Original	21573	Ready for Value	Ready for Value Extension	Kimberly G.	2002-10-10
150459	Original	21573	Ready for Value	Ready for Value Extension	Kimberly G.	2002-10-10
150460	Original	21573	Ready for Value	Ready for Value Extension	Kimberly G.	2002-10-10
150461	Original	21573	Ready for Value	Ready for Value Extension	Kimberly G.	2002-10-10
150462	Original	21573	Ready for Value	Ready for Value Extension	Kimberly G.	2002-10-10
150463	Original	21573	Ready for Value	Ready for Value Extension	Kimberly G.	2002-10-10

48. To approve item(s), select item(s) and click **Approve** button. Selected item(s) will be removed from the Classify Items Results (CLG) screen.
49. Click **Finish** button to return to the Processing Grid (CLG) page.
50. Click on the **Reject** button, to reject the selected item(s). Selected item(s) will be removed from the Classify Items Results (CLG) screen.
51. Click on the **Back** button to return to the Classify Items (CLG) screen, the rejected items will be visible here.

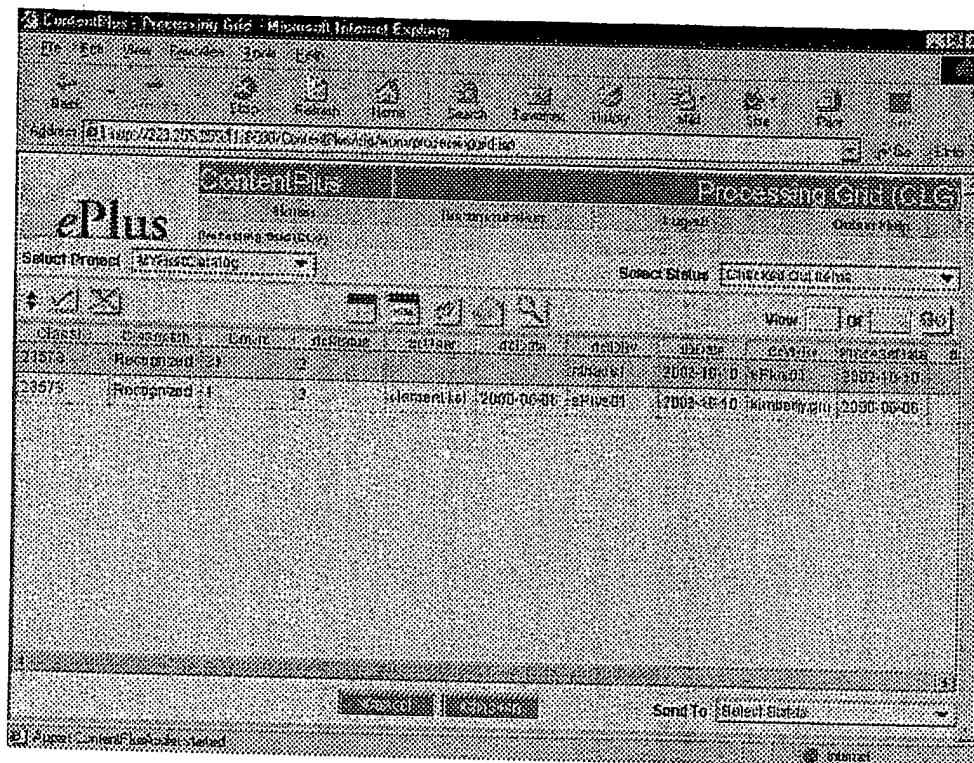
ContentPlus – Work Process Management User's Guide

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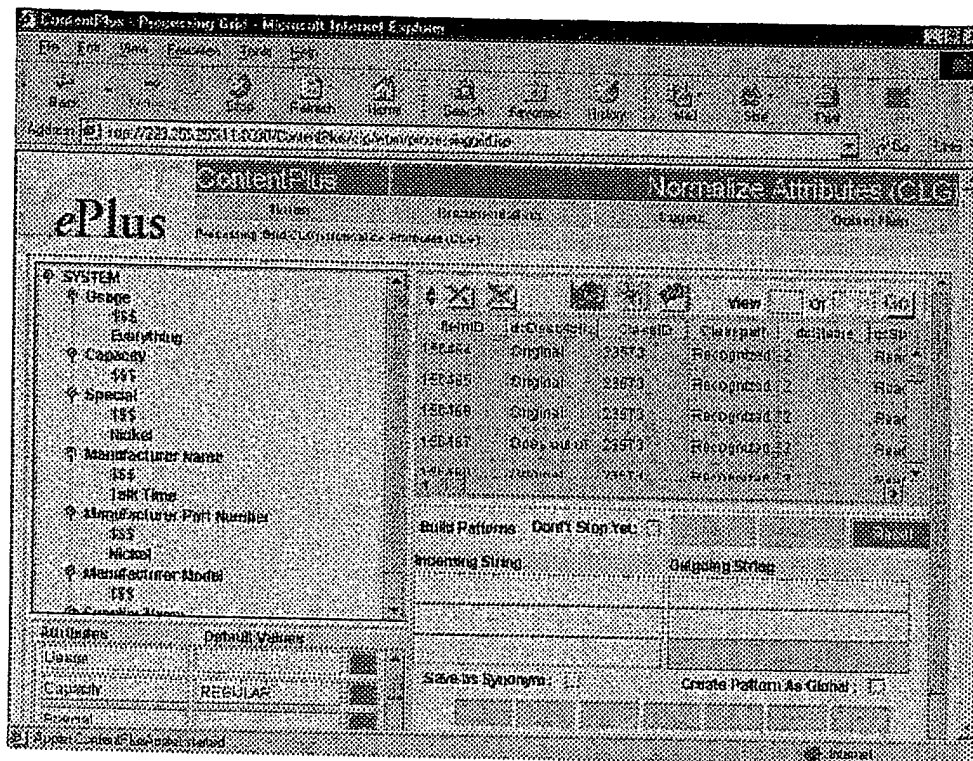
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52. From the **Select Status** drop-down list, select the status Ready For Value Extraction. This will show a list of class(es) for the selected project which are in the "Ready for Value Extraction" stage.
53. Select the class(es) and click on the **Check-out** button to proceed to the next stage. Selected classes or groups will be checked out and removed from the Processing Grid (CLG) screen.
54. Click on the **Cancel** button to return to the home page.



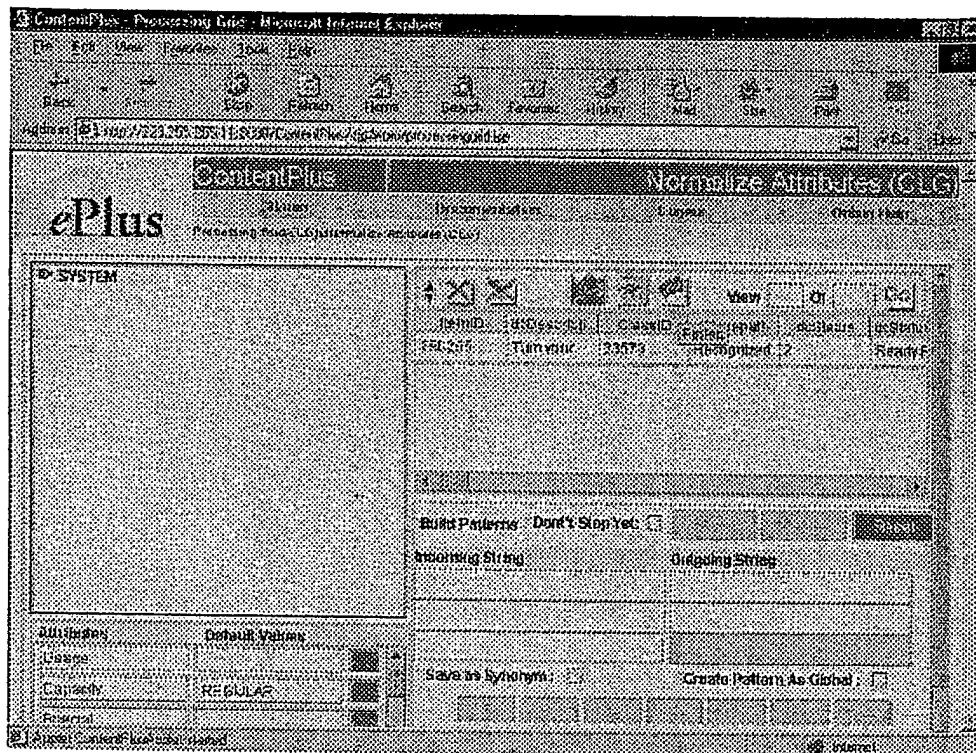
55. Click on the **Electronic Grid** icon to normalize the item attributes. The Normalize Attributes (CLG) screen will be displayed. Alternatively, the items can be sent directly to "Ready For Enrichment" stage by selecting it from the Send To drop-down list.



56. The extracted attribute and values are shown in a tree-like interface in the left pane.
57. Pattern building and associations can be performed here using the same method described in the previous steps.
58. Click on the **Back** button to return to the processing grid page.

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59. Select item(s) and click on the **Interpret** icon. All the selected item(s) will remain visible in the Value Normalize Attributes (CLG) screen, however the tree will be automatically collapsed.
60. Click on the **Finish** button to return to the Normalize Attributes Results (CLG).

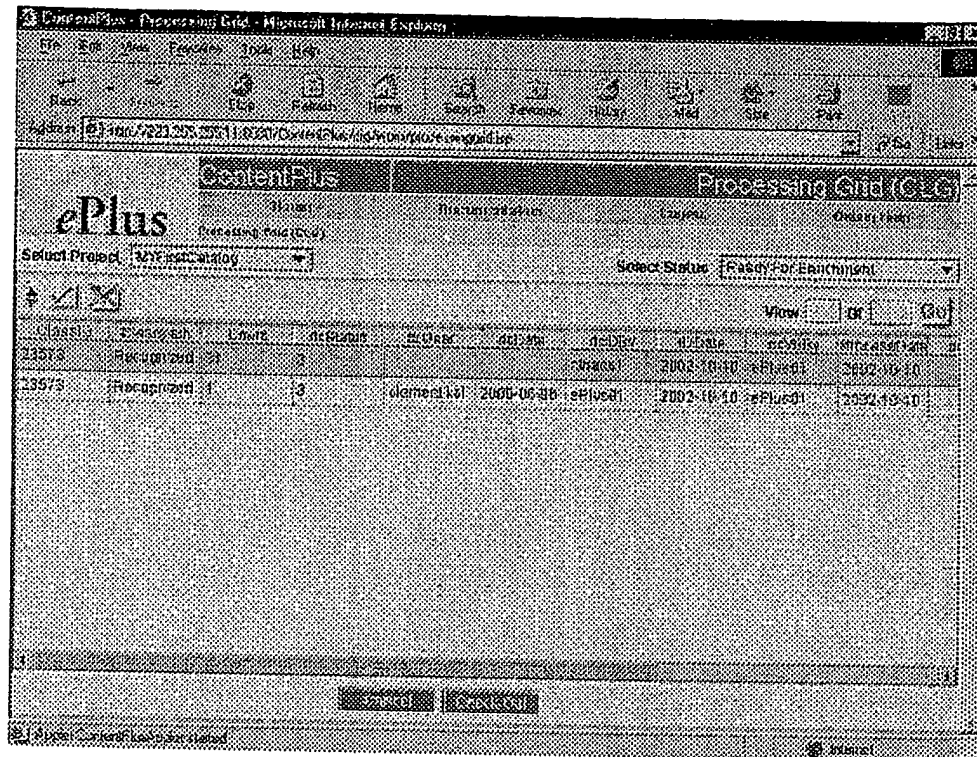
Client
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Item#	Description	Class ID	Class Path	Action	Action Description	Action	Action Date	Action User
100154	Original	21573	Recognize - 2	Ready For Value		100154	2002	
100155	Original	21573	Recognize - 2	Ready For Value		100155	2002	
100156	Original	21573	Recognize - 2	Ready For Value		100156	2002	
100157	Original	21573	Recognize - 2	Ready For Value		100157	2002	
100158	Original	21573	Recognize - 2	Ready For Value		100158	2002	
100159	Original	21573	Recognize - 2	Ready For Value		100159	2002	
100160	Original	21573	Recognize - 2	Ready For Value		100160	2002	
100161	Original	21573	Recognize - 2	Ready For Value		100161	2002	
100162	Original	21573	Recognize - 2	Ready For Value		100162	2002	
100163	Original	21573	Recognize - 2	Ready For Value		100163	2002	

Buttons: Back, Finish, Reject, Approve

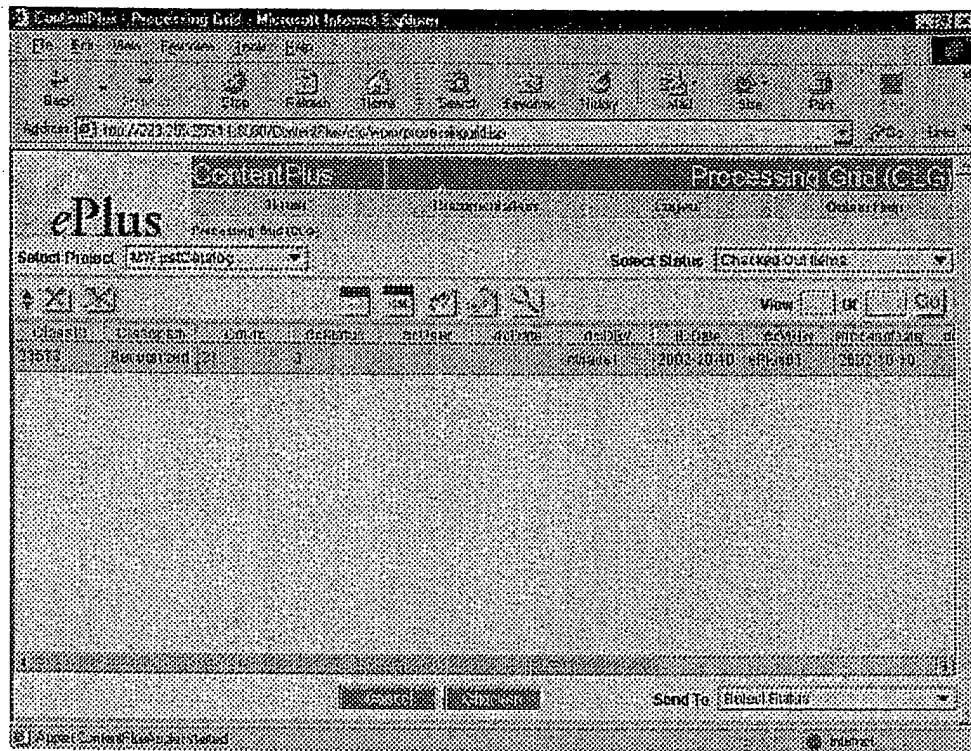
61. To approve item(s), select item(s) and click **Approve** button. Selected item(s) will be removed from the Normalize Attributes Result (CLG) screen.
62. Click **Finish** button to return to the Processing Grid (CLG) page.
63. Click on the **Reject** button, to reject the selected item(s). Selected item(s) will be removed from the Normalize Attributes Result (CLG) screen.
64. Click on the **Back** button to return to the Normalize Attributes (CLG) screen, the rejected items will be visible here.



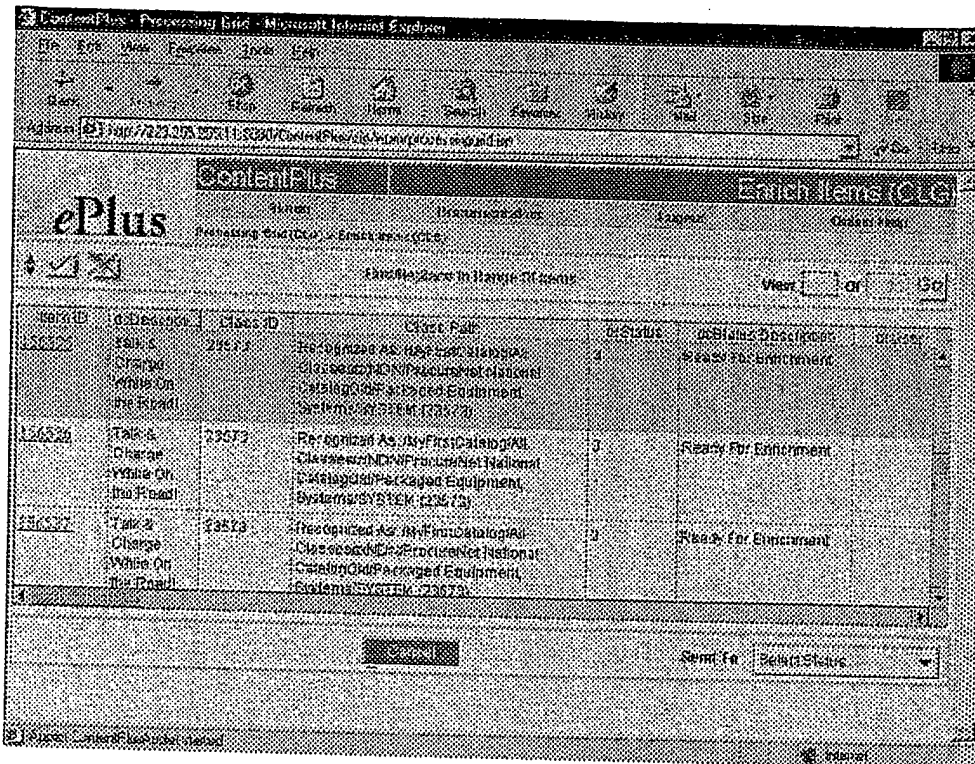
65. From the **Select Status** drop-down list, select the status Ready For Enrichment. This will show a list of class(es) for the selected project which are in the "Ready for Enrichment" stage.
66. Select the class(es) and click on the **Check-out** button to proceed to the next stage. Selected classes or groups will be checked out and removed from the Processing Grid (CLG) screen.
67. Click on the **Cancel** button to return to the home page.
68. From the **Select Status** drop-down list, select the status Checked Out Items. This will show a list of all class(es) or groups which are checked out.

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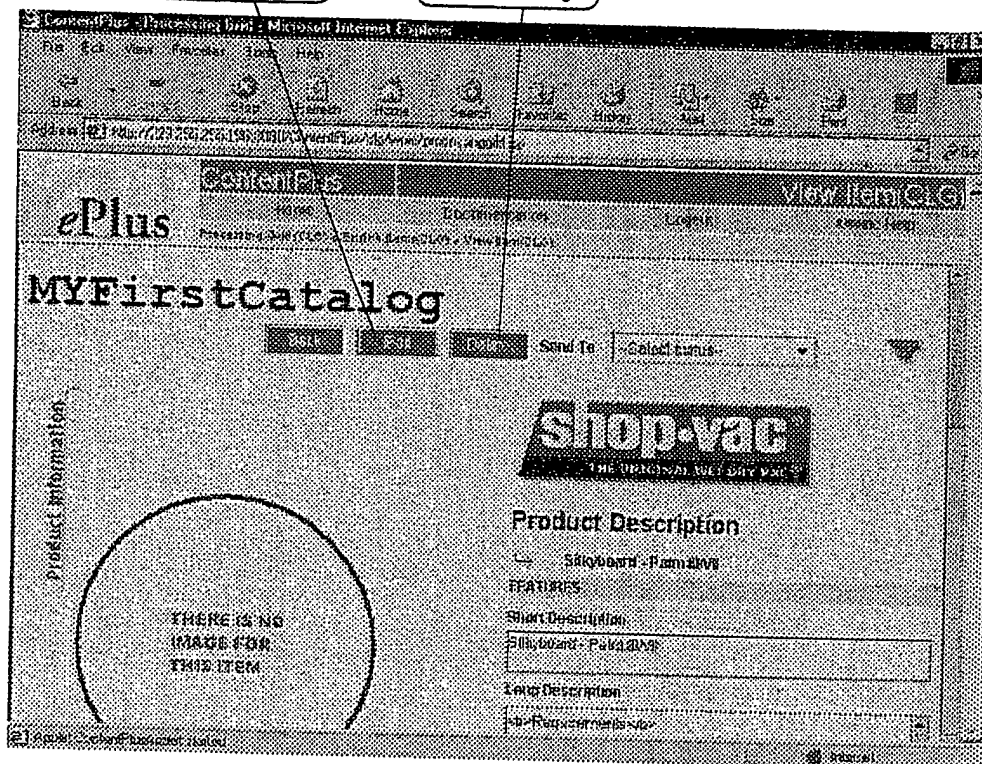
69. Select the class(es) from the list with dcStatus=3 and click on the **Enrich Items** icon, the Enrich Items(CLG) screen will be displayed.



70. Click on the Item ID link from the list displayed, the View Item screen will be displayed showing the selected item information.
71. Click on the **Cancel** button to return to the Processing Grid page.
72. Alternatively, from the **Send To** drop-down list, user can send items to next or previous status.

Click on this to
edit the item
information

Click on this to
delete the item
from the catalog



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ContentPlus - Processing Item - Microsoft Internet Explorer

Address: http://192.168.1.100:8080/ContentPlus/processing/colg

ePlus ContentPlus View Item (CLG)

Home Dashboard Catalog Order List

Processing Item (CLG) - Status: ContentPlus is closed

CDS (CD-R) 50min 48x

Effective Date: 2002-09-10

Expiry Date: 2002-09-10

Shipable Packing Quantity: 1

Shipable Unit Of Measure: EA

Delivery Date: 0

Purchase Frequency: 1

UPC Code: 0

Class Specific Attributes

Usage: efficient

Capacity: 545

Speed: 18x

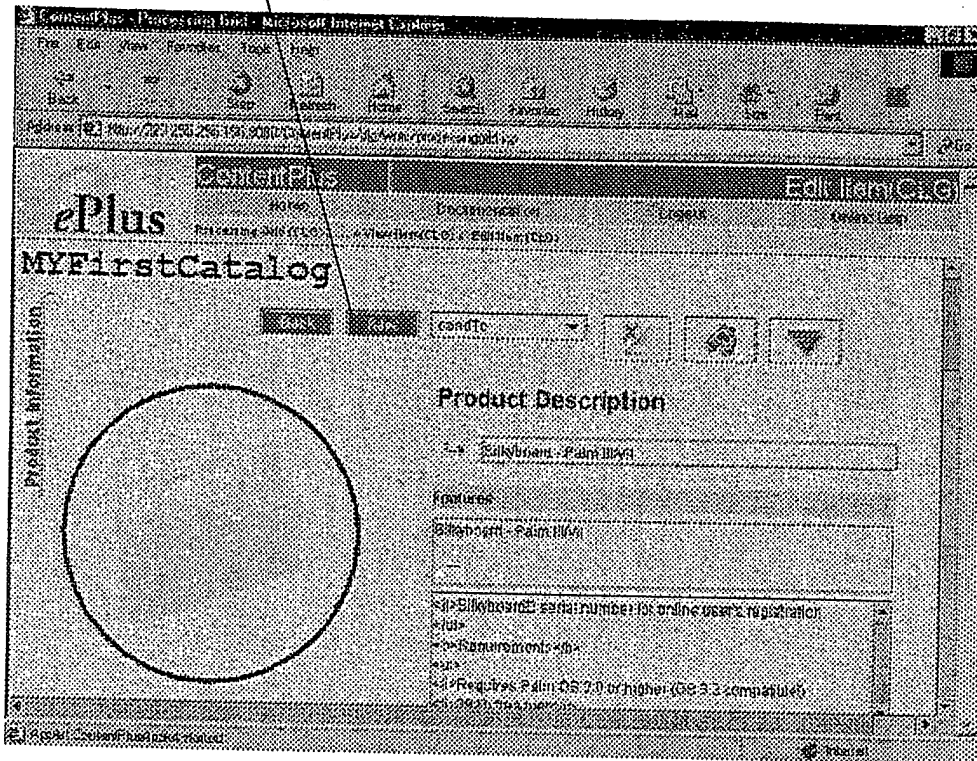
Manufacturer Name: 18x

Manufacturer Part Number: 18x

Status: ContentPlus is closed

73. Click on the **Back** button to return to the Enrich Items (CLG) screen. Click on the **Delete** button to delete the item from the catalog
74. From the **Send To** drop-down list, user can send items to next or previous stages.
75. Click on the **Edit** button for modifying the item information.

Click on this to
save the item
data.



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Click on this to delete
the selected
attachment(s)

ContentPlus Processing Unit - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Address: http://206.77.225.253:1901/ContentPlus/ViewItem.asp?ItemID=...

ContentPlus **Edit Item (X)**

Home Localization Links Description

Processing Unit (CPU) - View Item (CPU) - Edit Item (CPU)

List of Attachments:

Thumbnail ☐ **Cost Currency:** USD

Cost: 25.95

Cost Unit Of Measure: EA

Cost Packaging Quantity: 1

Effective Date: 9/10/2002

Expiry Date: 9/10/2006

Shippable Packaging Quantity: 1

Shippable Unit Of Measure: EA

Delivery Days: 10

Purchase Frequency: 0

IPC Code: 1171

Class Specific Attributes:

Usage: 400000

Capacity: 245

Special: 245

View Accessories
Add Accessories

ContentPlus Processing Unit

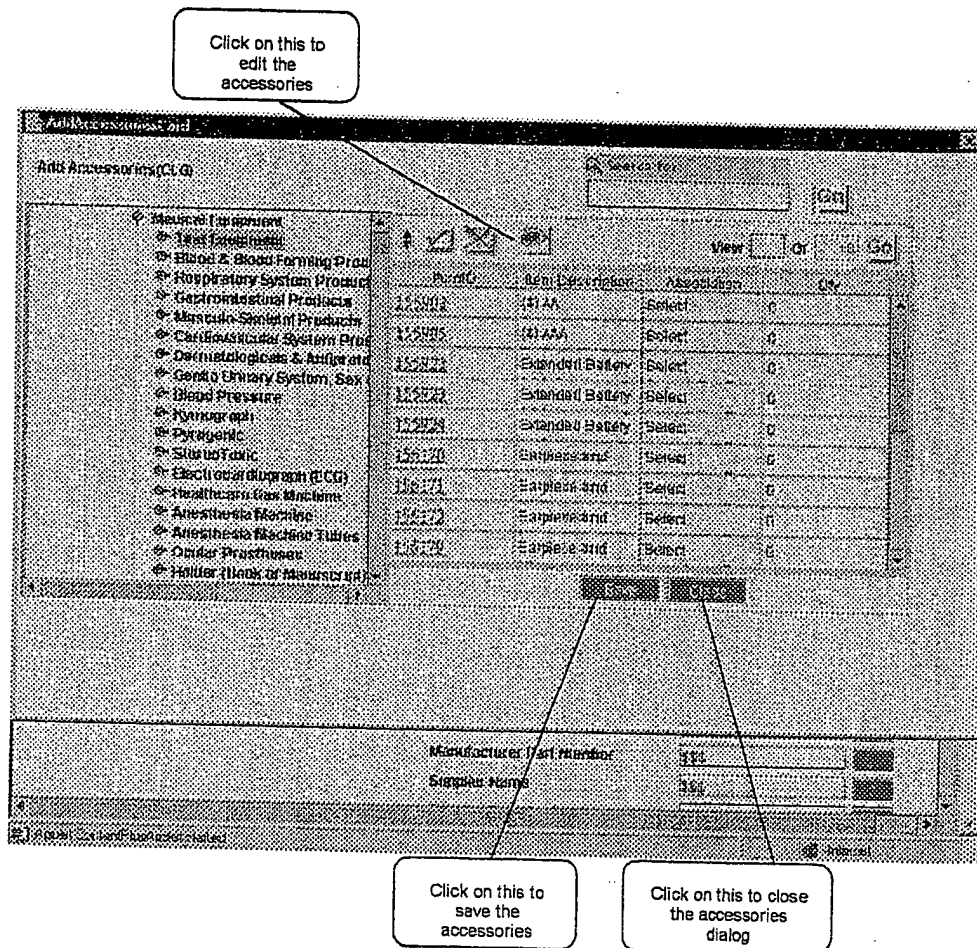
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76. In the **Product Description** field, modify the item description.
77. In the **Manufacturer Part Number** field, change the manufacturer part number for the item.
78. In the **Supplier Name** field, modify the supplier name for the item.
79. In the **Supplier Part Number** field, modify the supplier part number for the item.
80. In the **Price Currency** field, modify the price currency for the item.
81. In the **Price** field, modify the item price.
82. In the **Cost Currency** field, modify the cost currency for the item.
83. In the **Cost** field, modify the item cost.
84. In the **Cost Unit of Measure** field, modify the cost unit of measure for the item.
85. In the **Cost Packaging Quantity** field, modify the cost packaging quantity for the item.
86. In the **Effective Date** field, modify the effective date for the item.
87. In the **Expiry Date** field, modify the expiration date for the item.

88. In the **Shippable Packaging Quantity** field, modify the shippable packaging quantity for the item.
89. In the **Delivery Days** field, modify the maximum number of days within which the item will be delivered.
90. In the **Purchase Frequency** field, modify the purchase frequency for the item.
91. In the **UPC Code** field, modify the UPC code for the item.
92. In the **Upload Image** field, enter the path for the item image file to be uploaded. Click on **Browse Image** button to select the item image file from the appropriate location on the local system.
93. In the **Add Attachments** field, enter the path for the attachment file to be uploaded. Click on **Browse** button to select the file from appropriate location on the local system. If required, link an existing shared attachment with the item by clicking on the shared attachment icon and selecting an existing attachment from the shared attachment dialog box.
94. In the **Class Specific Attributes**, modify the class attribute values. The options for the attribute values can be viewed by clicking on the Select Attributes button adjacent to the attribute value field.
95. Click **Add Accessories**, the Add Accessories (CLG) screen will be displayed. Select the class from the schema tree, which contains items that must be added as an accessory. Select the item from the item list in the right pane, select the association type from the drop-down list, enter the quantity and click on the Save button. The selected item will be added as an accessory for the original item and user will be returned to Edit Item screen.

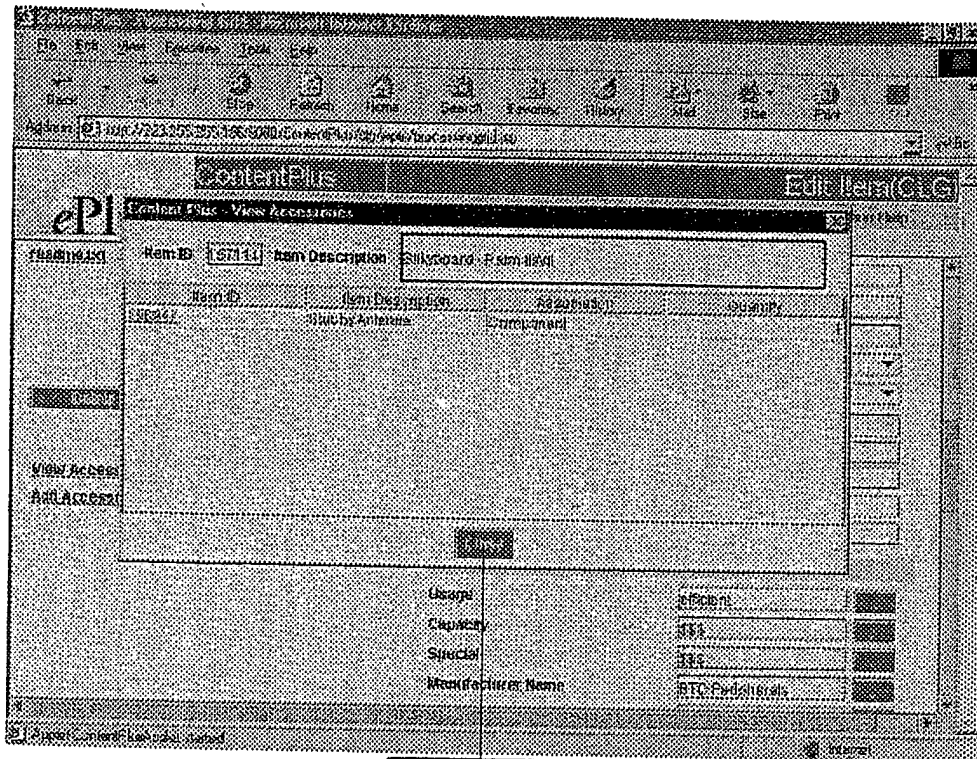
If needed, enter the item description or item id in the search text field and click on the Go button. Matching items will be displayed in the right pane.



96. Click on the **Close** button to close the Add Accessories(CLG) screen.
97. Click on the **Edit** icon, to edit the accessory information in the Edit Accessory window.
98. Click on the **View Accessories** link, the View Accessories dialog box will be displayed.

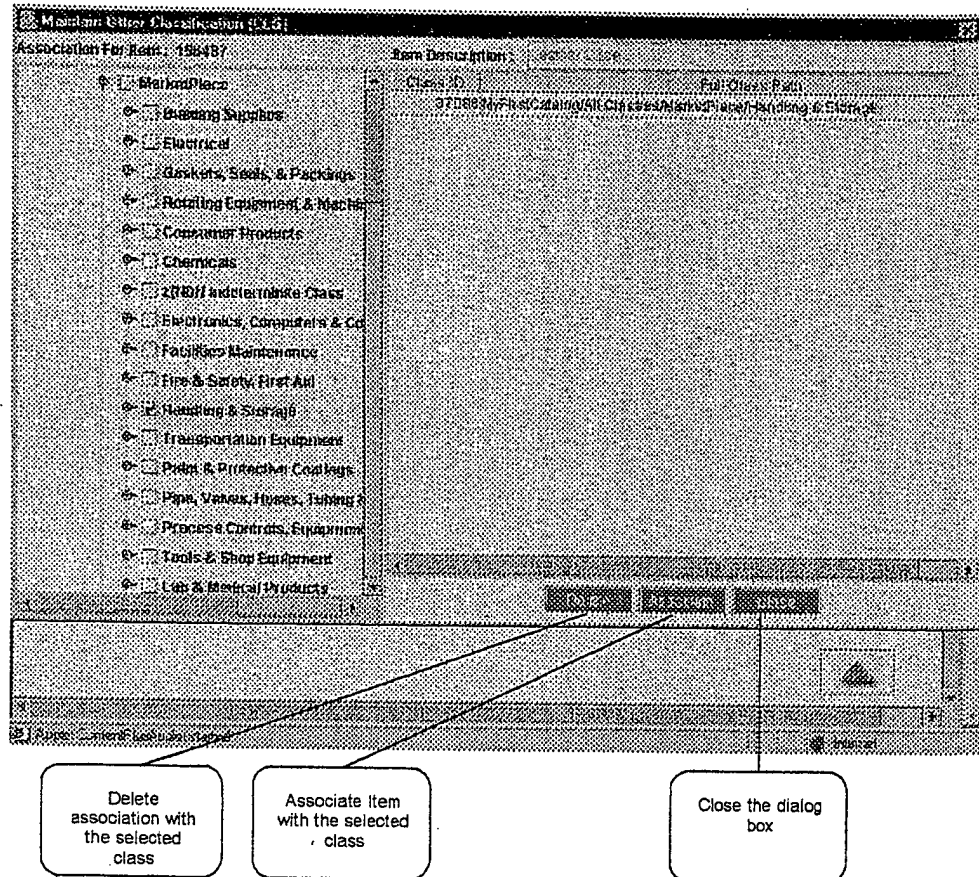
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Click on this to close
the View Accessories
screen

99. Click on the **Close** button to close the View Accessories dialog.
100. Click on the icon for spell check if you wish to spell check the contains of the page.
101. In the Edit Item (CLG) screen, click on the **Maintain Other Classification** link, the Maintain Other Classification (CLG) screen will appear.

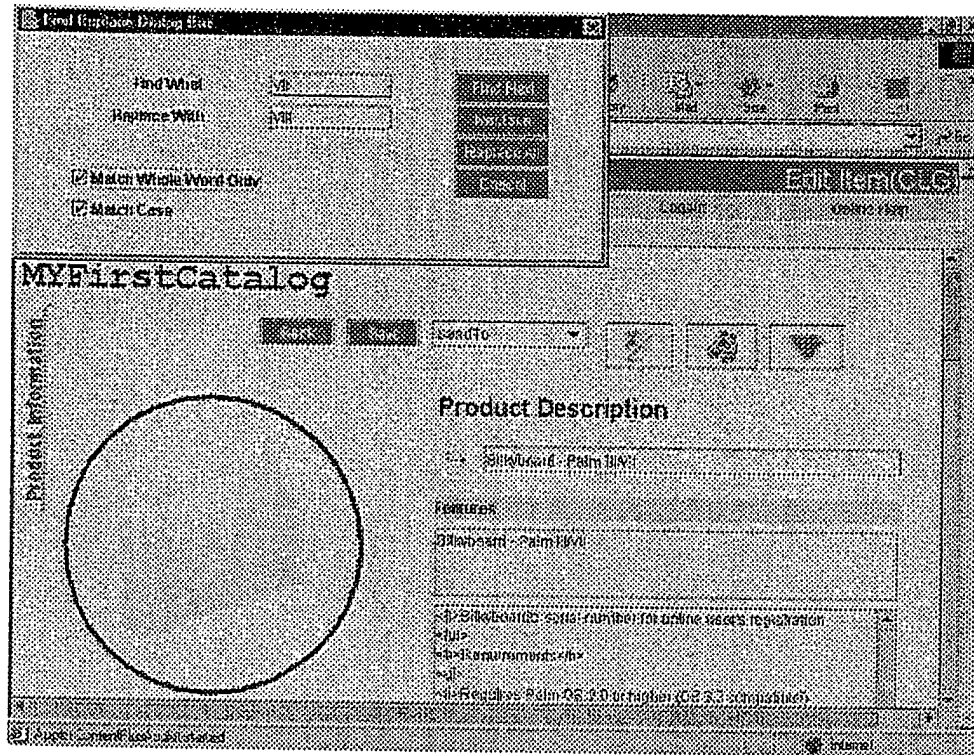


102. Expand the schema class tree if needed, and click on the class in the left pane. The right pane will display the list of items for the selected class.
103. Select the class from the schema tree, click on the **Associate** button to associate the item with the class.
104. Click on the **Delete** button, to delete the item association.
105. Click on the **Back** button, to return to Maintain Other Classification (Checkout) items screen.



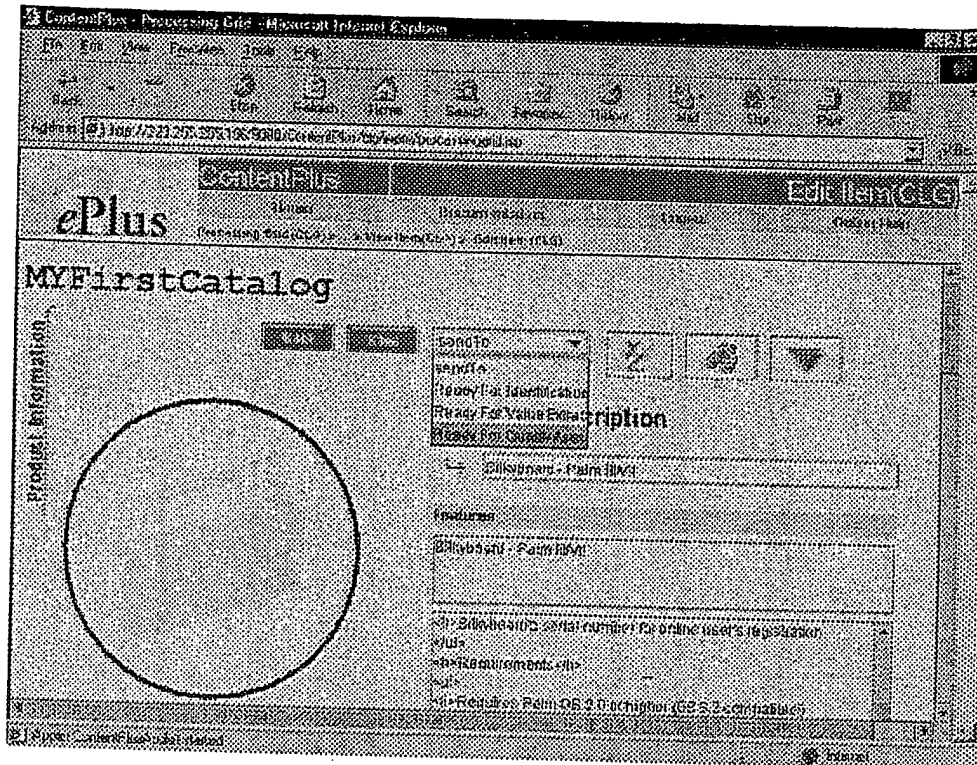
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107. Click on the icon for Find & Replace if you wish to Find and/or Replace contents of the page.



Find What	Enter the find text/word
Replace With	Enter the replacement text/word
Find Next	Find the next occurrence of the find word
Replace	Perform replacement for the current occurrence only
Replace All	Replace all occurrences of the find word with the replacement word
Cancel	Cancel the Find and Replace operation and close the dialog box
Match Whole Word Only	Search for whole words only.
Match Case	Perform case-sensitive search

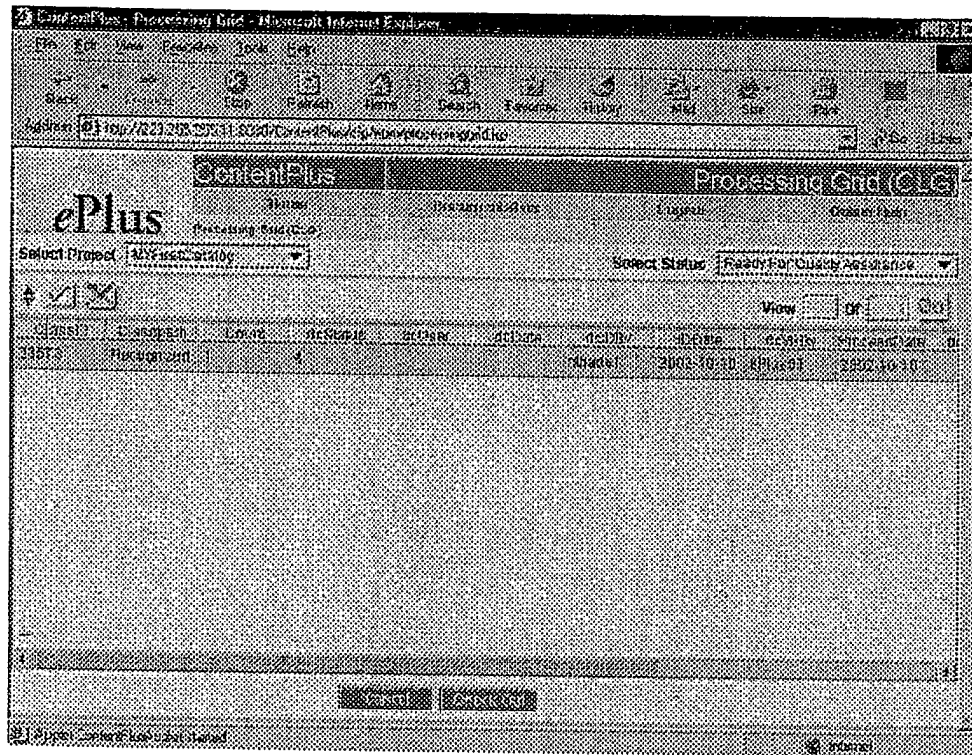
108. Click on the **Save** button in order to save the item details. From the **Send To** drop-down list, user can send items to next or the previous stage.



109. Click on the **Back** button to return to the View Item screen.
110. In the view item screen, click on the **Back** button to return to the Enrich Items(CLG) screen.
111. Click on the **Cancel** button to return to the Processing Grid Screen.

Client
Job No
Status
Page

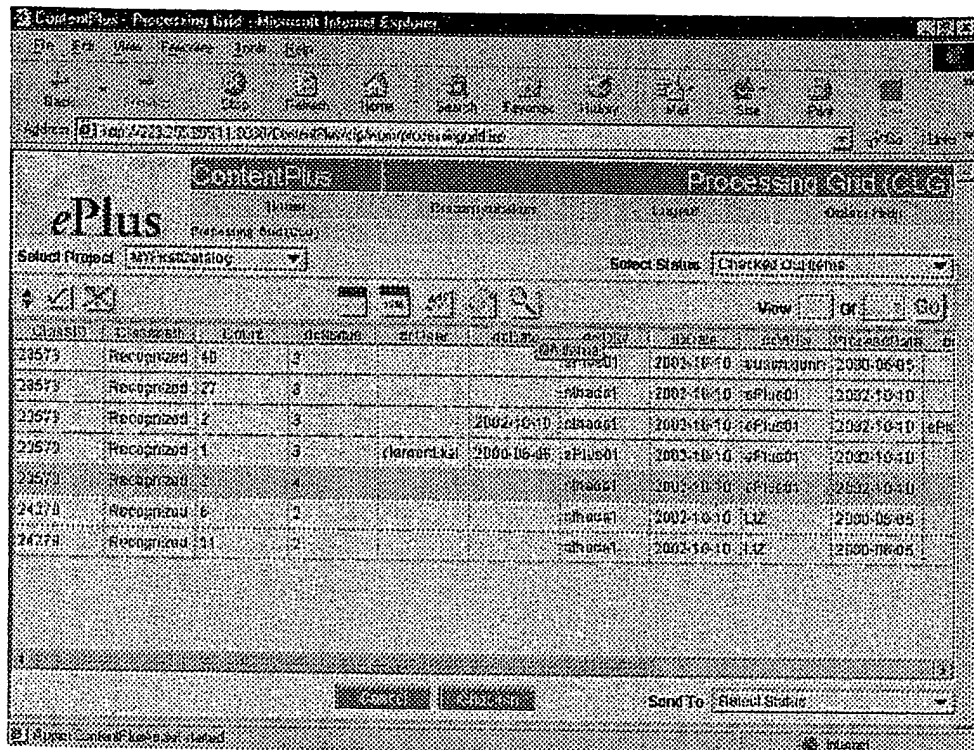
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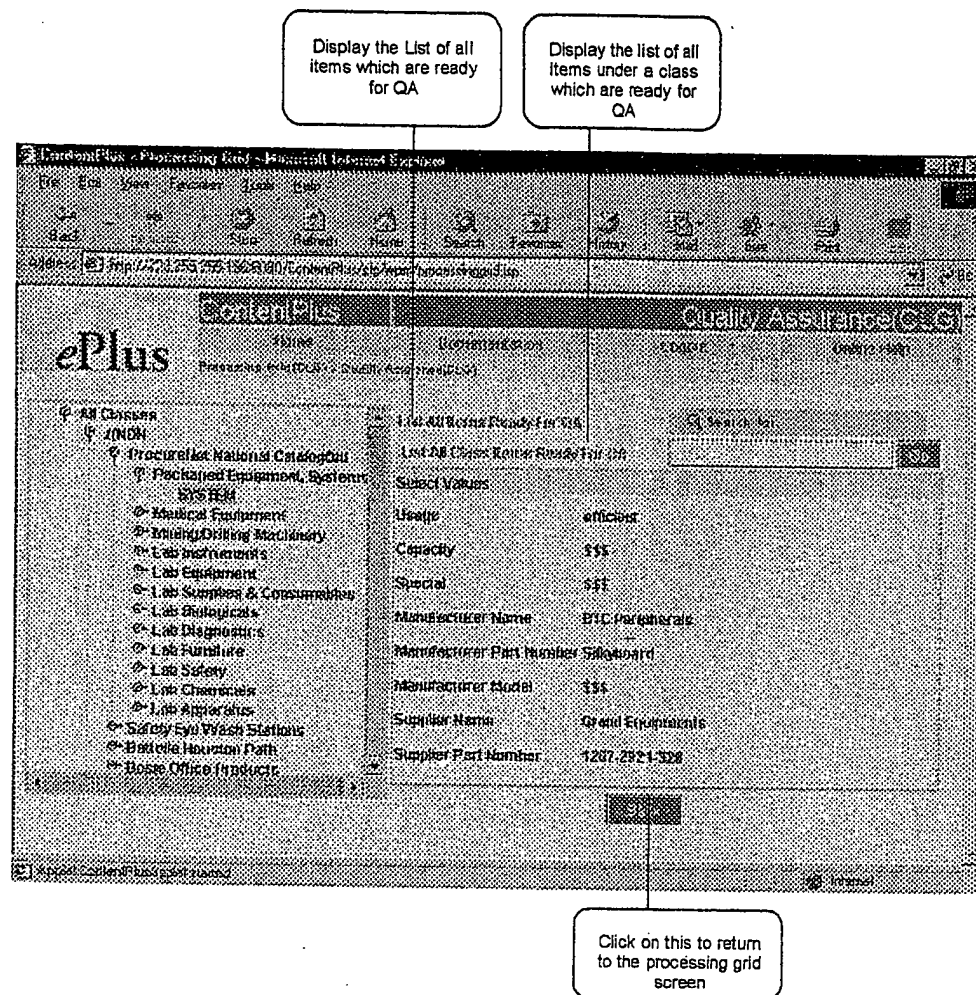
112. From the **Select Status** drop-down list, select the status Ready For Quality Assurance. This will show a list of class(es) for the selected project which are in the "Ready for Quality Assurance" stage.
113. Select the class(es) and click on the **Check-out** button to proceed to the next stage. Selected classes or groups will be checked out and removed from the Processing Grid (CLG) screen.
114. Click on the **Cancel** button to return to the home page.
115. From the **Select Status** drop-down list, select the status Checked Out Items. This will show a list of all class(es) or groups which are checked out.

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Job No
Status
Page

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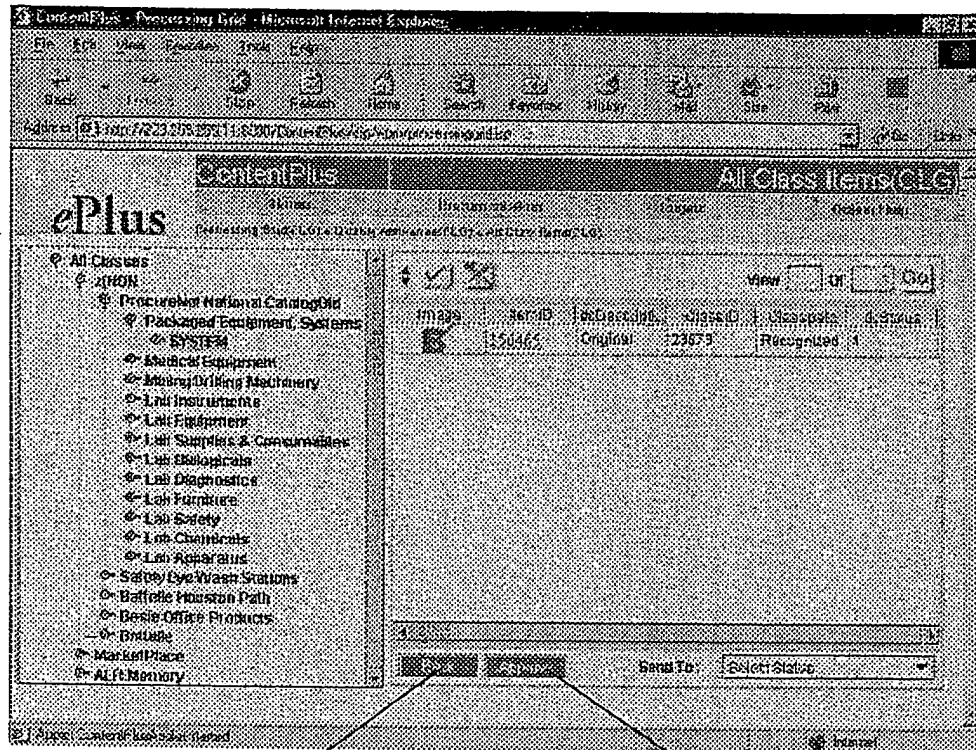
116. Select the class(es) from the list with dcStatus=4 and click on the **QA Items** icon, Quality Assurance (CLG) screen will be displayed.



117. In order to view all the items in the Ready for Quality Assurance stage, click on the **List All Items Ready for QA**, the All Items Ready for QA(CLG) screen will appear with the list of items.
118. Item can be searched using the full-text search feature, by entering freeform text in the search text field.
119. In order to view items under a class which are in the Ready for Quality Assurance stage, expand the schema class tree and select the required class. Click **List All Class Items Ready for QA**, the All Class Items (CLG) screen will be displayed with the list of items under the selected class.
120. Click on the **Back** button to return to the processing grid screen.

Client
Job No
Status
Page

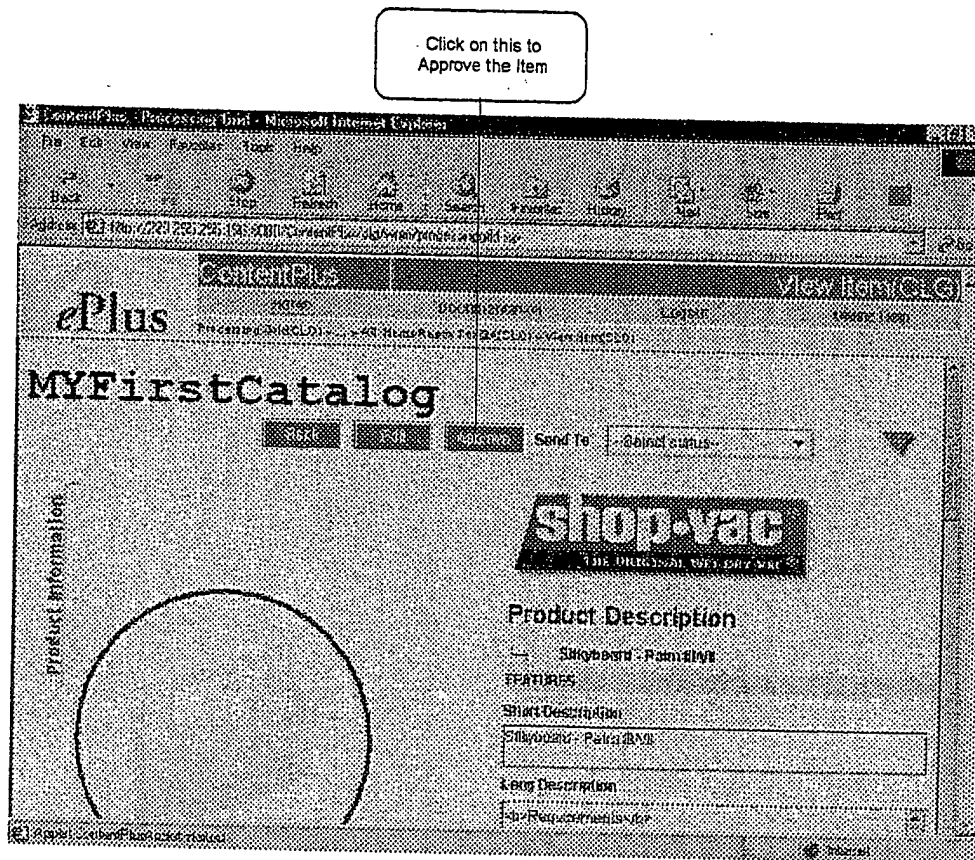
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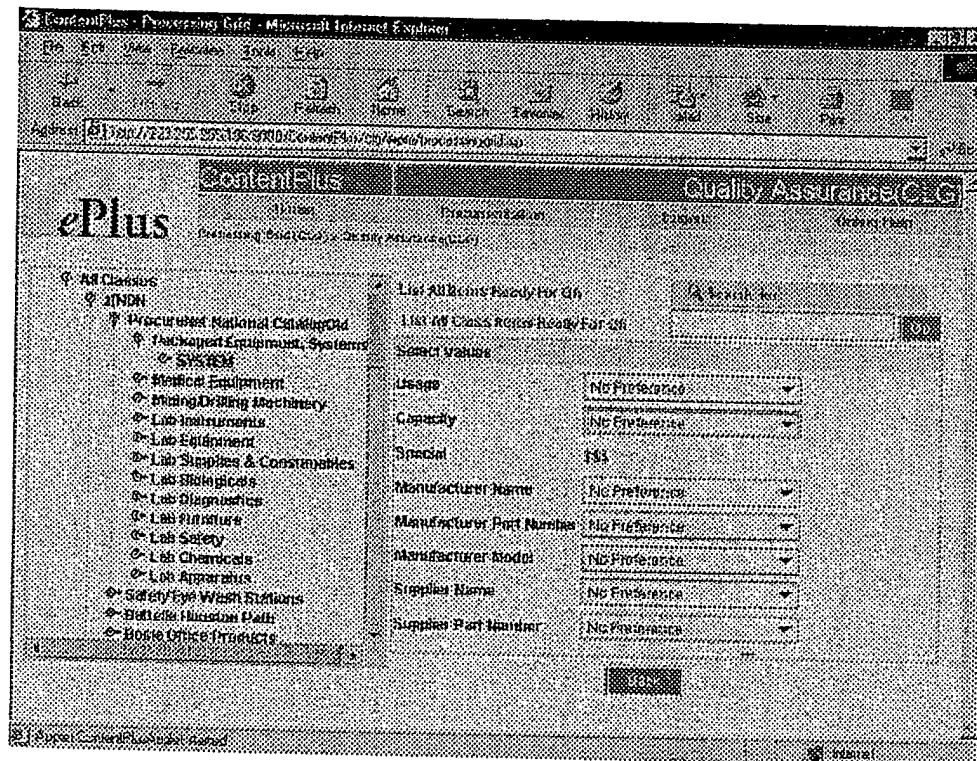
Click on this to return to the Quality Assurance (CLG) screen

Click on this to Approve the currently selected item

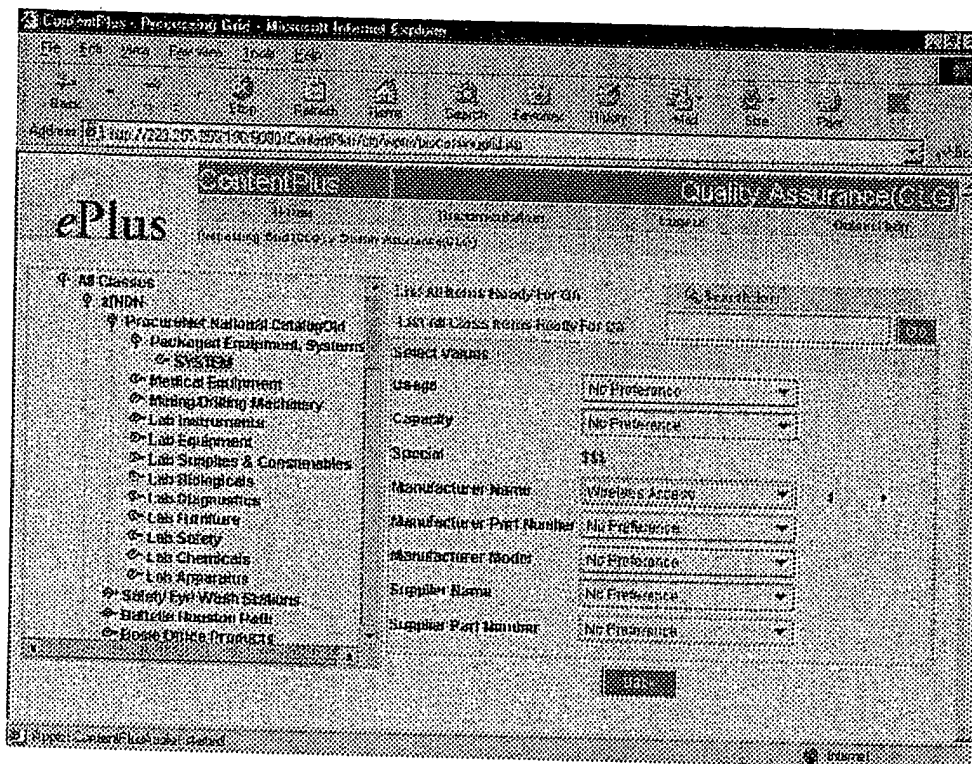
121. Click on the Item ID link from the All Class Item list, the View Item (CLG) screen will be displayed.
122. Click on the **Back** button to return to the Quality Assurance (CLG) screen.
123. Alternatively, from the **Send To** drop-down list, user can send item(s) to previous status. Selected item(s) will be removed from the list.
124. Select the item(s) from the list and click **Approve** button to approve the current item. Selected item(s) will be removed from the list.



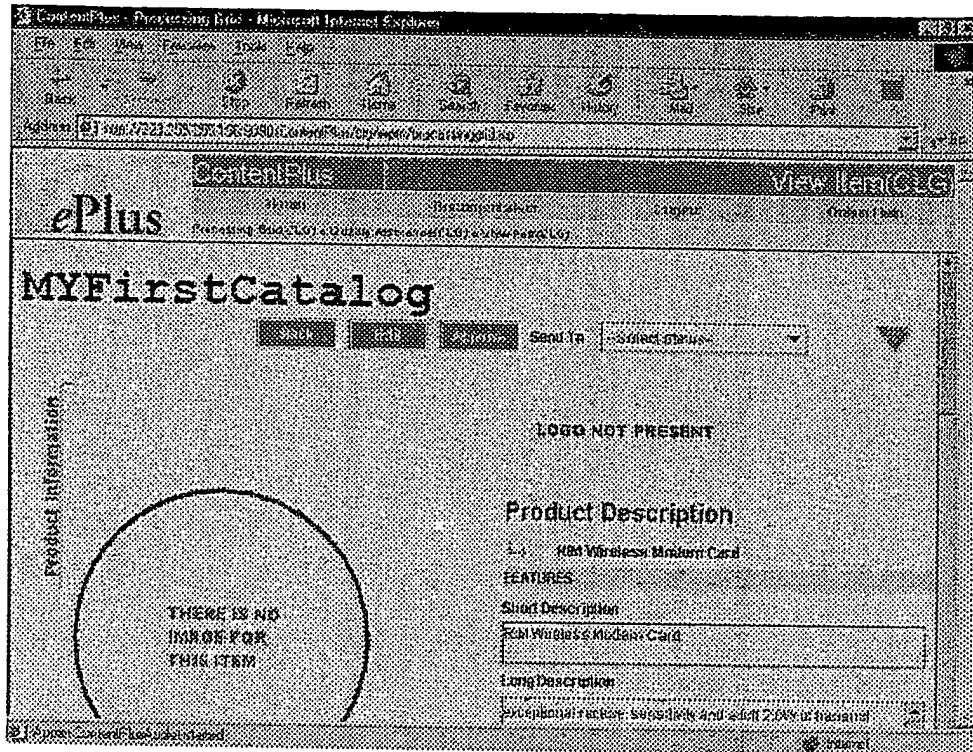
125. Click on the **Back** button to return to the All Class Items(CLG) screen. Click on the **Edit** button, for modifying the item information.
126. From the **Send To** drop-down list, user can send items to previous stage.
127. Click on the **Approve** button to approve the item. On approving item, next item will appear, or it will return to the View Item (CLG) screen if no further items exist.
128. In the Quality Assurance (CLG) screen, you can search for items based on their attributes.
129. Expand the schema class tree if needed, and click on the class in the left pane under which the item(s) are to be searched based on their attributes. In case, the exact path for the class is not known then use the Find Class feature to locate the required class. The right pane will display the attribute names and a drop-down list containing the possible attribute values. The default value in the drop-down list will be set to **No Preference**.



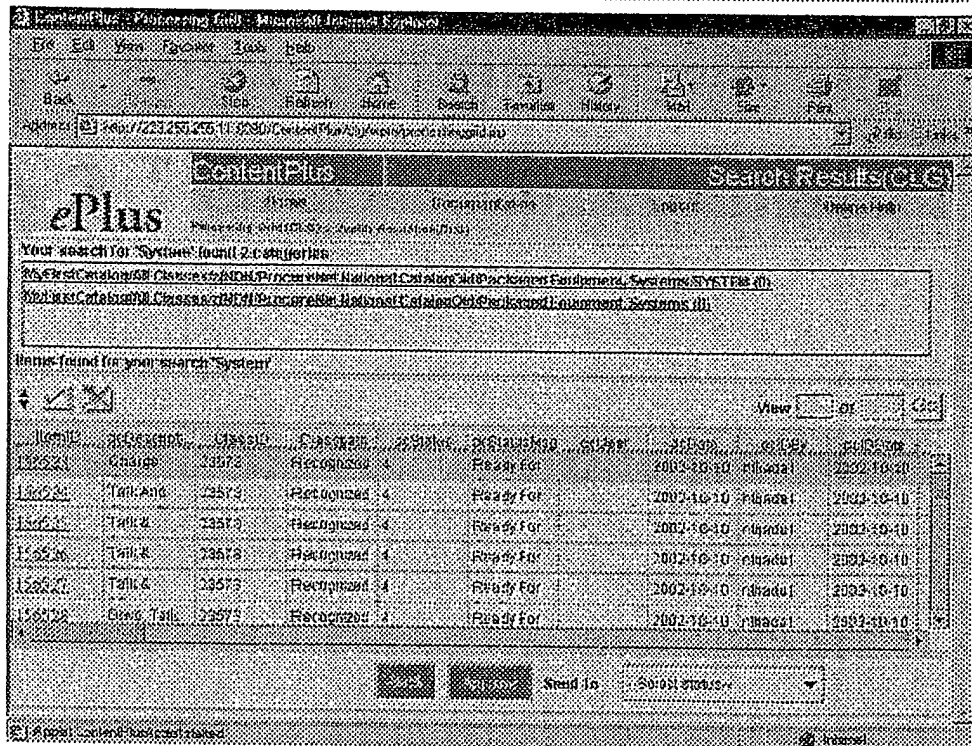
130. Define the search criteria by selecting values from the drop-down list to search for items matching the specified criteria. If items matching the specified criteria are found, a count of items will be displayed against the drop down list. For e.g. in the sample screen displayed below, there is 1 item with Manufacturer Name as Wireless Access.



131. If multiple items matching the search criteria are found, you can further refine your search to narrow down on specific items by modifying the search criteria. Once the item count is equal to 1, you click on the link to view the matching item. The View Item (CLG) screen will be displayed as shown below.



132. Click on the **Back** button to return to Quality Assurance (CLG) screen.
133. Similarly, items can be searched by entering free-form text in the **Search For** field in the right pane. Enter a text in the **Search For** field, and click on the **Go** icon. The Search Results screen showing the classpath (categories) along with the item count and the list of items will be displayed as shown below.



- ### 3.4 Processing Grid (Using HTML Grid)

-
- ContentPlus - Processing Field - Microsoft Internet Explorer
- File Edit View Favorites Tools Help
- Back Forward Stop Refresh Home Search Parameters History Mail Log Exit
- Address http://202.55.55.11:8080/ContentPlus/comp/processingplus.asp
- ContentPlus Processing Field (CPS)
- ePlus Home Processing Field (CPS) Log Out Order Mail
- Select Project: MyFirstCatalog Select Status: Ready For Release
- View or Print
- | ID | Catalog | Type | Operator | Status | Date | User | Date | User | Date |
|--------|----------------|------|----------|------------|------------|----------|------------|------------|------------|
| 630131 | MyFirstCatalog | 5 | 1 | susan.gunn | 2000-06-06 | stephen | 2000-06-06 | | |
| 630131 | MyFirstCatalog | 110 | 1 | | | stephen | 2000-06-06 | | |
| 630131 | MyFirstCatalog | 42 | 1 | | | stephen | 2000-06-06 | | |
| 630131 | MyFirstCatalog | 1 | 1 | | | kimberly | 2000-06-06 | susan.gunn | 2000-06-06 |
| 630131 | MyFirstCatalog | 64 | 1 | | | kimberly | 2000-06-06 | | |
| 630131 | MyFirstCatalog | 12 | 1 | kimberly | 2000-06-06 | stephen | 2000-06-06 | kimberly | 2000-06-06 |
| 630131 | MyFirstCatalog | 13 | 1 | | | stephen | 2000-06-06 | kimberly | 2000-06-06 |
| 630131 | Recognized | 6 | 1 | stephen | 2000-06-06 | kimberly | 2000-06-06 | | |
| 630131 | MyFirstCatalog | 27 | 1 | | | kimberly | 2000-06-06 | LZ | 2000-06-06 |
| 630131 | MyFirstCatalog | 71 | 1 | LZ | 2000-06-06 | kimberly | 2000-06-06 | | |
- Print
- Project: ContentPlus print ended

- From the **Select Project** drop-down list, select the project.
- From the **Select Status** drop-down list, select the status Ready For Identification (default is Checked Out Item). This will show a list of class(es) for the selected project.
- Select one or more class(es) and click on **Check-out** button. Selected classes or groups will be checked out and removed from the Processing Grid (CLG) screen.
- Click on the **Cancel** button to return to the home page.

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6. From the **Select Status** drop-down list, select the status Checked Out Items. This will show a list of all class(es) or groups which have been checked out.

The screenshot shows the ContentPlus web application interface. At the top, there's a navigation bar with 'Home', 'Documentation', 'Links', and 'Index (1/1)'. Below this, there's a 'Select Project' dropdown set to 'MYFHSOC2000' and a 'Select Status' dropdown set to 'Checked Out Items'. The main area displays a table of items with the following columns: ClassID, ClassName, Count, and Status. The table contains several rows of data, including items with ClassID 23573, 23574, 23575, 23576, 23577, and 23578. At the bottom, there's a 'Send To' dropdown set to 'Select Status'.

ClassID	ClassName	Count	Status
23573	Recognized 40	2	
23573	Recognized 32	4	
23573	Recognized 2	4	
23573	Recognized 1	4	
23576	Recognized 6	2	
23577	Recognized 11	2	
23578	Recognized 17	1	

7. Select the class(es) from the list and click on the **HTML Grid** icon, the Classify Item(CLG) screen will be displayed. .

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Click on this to open
Select Fields to View
dialog box

ContentPlus - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Home Search Advanced History Mail News

Address: http://207.221.251.251:11/EXTRA/ContentPlus/ContentPlus.asp

ContentPlus

ePlus

Procedure: NWEF009-Create New Item (CLD)

View

Of

Go

Item ID	Description	Class ID	Class Name	Status	Job No
150256	Turn your	030131	My First Class	1	Real
150257	Turn your	030131	My First Class	1	Real
150258	The son of	030131	My First Class	1	Real
150259	Turn your	030131	My First Class	1	Real
150260	Turn your	030131	My First Class	1	Real

Load Patterns: Don't Stop Yet: []

Working

Incoming String

Outgoing String

Save as Symbol: []

Create Pattern As Global: []

Attributes

Default Values

Class: []

Capacity: REGULAR

Graphic: []

Item ID: 150256

Item Name: Turn your

Item Description: Turn your

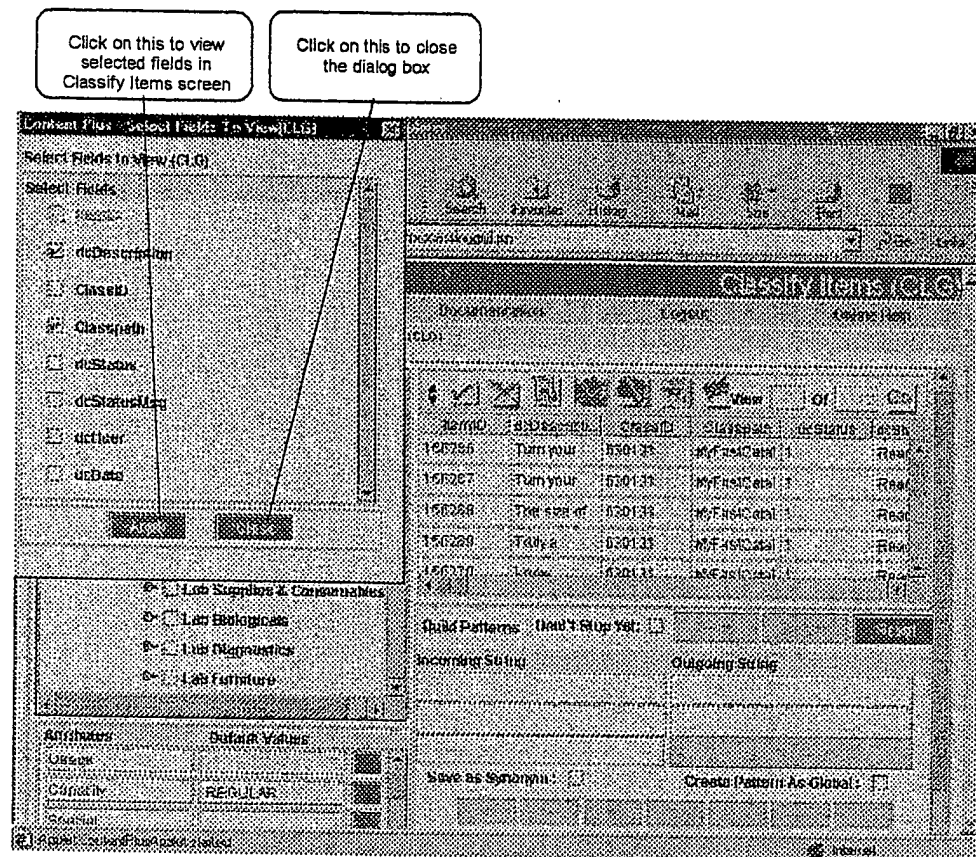
Item Class: 030131

Item Status: 1

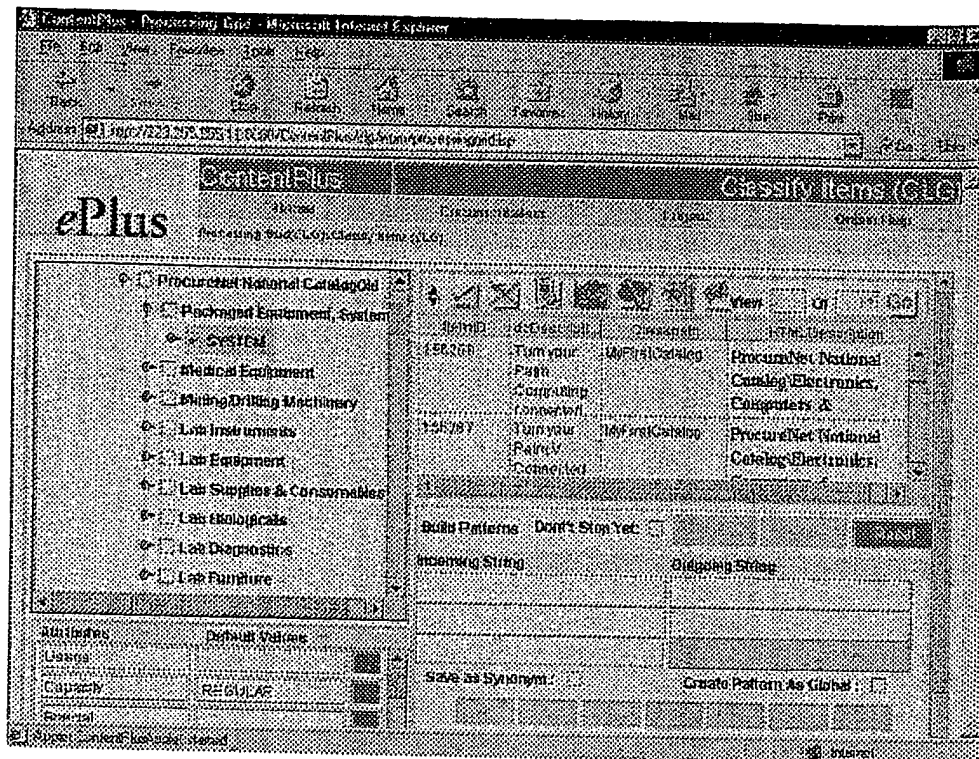
Item Job No: Real

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8. Click on the **Select Items to View** icon, the Select Fields to View (CLG) dialog box will appear.
9. Select the fields in the Select Fields to View (CLG) dialog box, and click on the **Apply** button. The selected fields will be displayed in the right pane of the Classify Items (CLG) screen.



10. Use the slider on the left of the table to adjust the height of the table row.
- All the subsequent steps are identical to the process described in section 3.3 Processing Grid (Input Grid).

APPENDIX IV – DATA SYNDICATION

ContentPlus – Data Syndication User's Guide

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1 Introduction

1.1 Welcome to ContentPlus

ContentPlus, is a robust, easy-to-use rich content creation and management application that provides users with the ability to:

- ☐ Create a standard rich content database with referencing schema of classification.
- ☐ Maintain classification schema and items by addition, modification or deletion.
- ☐ Import classification schema and rich content data from different sources.
- ☐ Optimize Content and Product Views based on User Profiles and Shopper Groups.
- ☐ Manage Access Authorization and Security Levels for application and database.

1.2 System Requirements

ContentPlus is a web-based, browser-independent application. As a web-based application, ContentPlus requires the Java Runtime Environment (JRE), a standard browser and access to the Internet.

As a browser-independent application, ContentPlus can be accessed with a variety of standard browsers, including Microsoft Internet Explorer and Netscape Navigator. The following are the software and hardware requirements for using ContentPlus.

Software Requirements

- ☐ Java Runtime Environment v 1.4.0 or higher
- ☐ Internet Explorer v. 5.5 or higher
- OR-
- Netscape Navigator v. 6.0 or higher

Hardware Requirements

- ☐ 800 x 600 pixels screen resolution

1.3 Contacting ePlus Content Services, Inc.

Refer to the following sections for information about contacting ePlus, inc. for customer support or sales information.

1.3.1 ePlus, Inc. Headquarters

ePlus, inc. is a leading provider of supply chain management solutions. From integrated financial services, to an end-to-end, web-based procurement application, to a comprehensive, web-based asset management application, to

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unparalleled client services, ePlus, inc. provides its rapidly growing customer base complete supply chain management solutions.

Corporate Headquarters

Address

ePlus, inc.
400 Herndon Parkway
Herndon, VA 20170

Telephone

1-703-264-0770

-or-

1-800-827-5711

Office Hours

Monday to Friday

9:00 A.M. to 5:30 P.M. Eastern Standard Time

2 Getting Started

2.1 Logging into ContentPlus

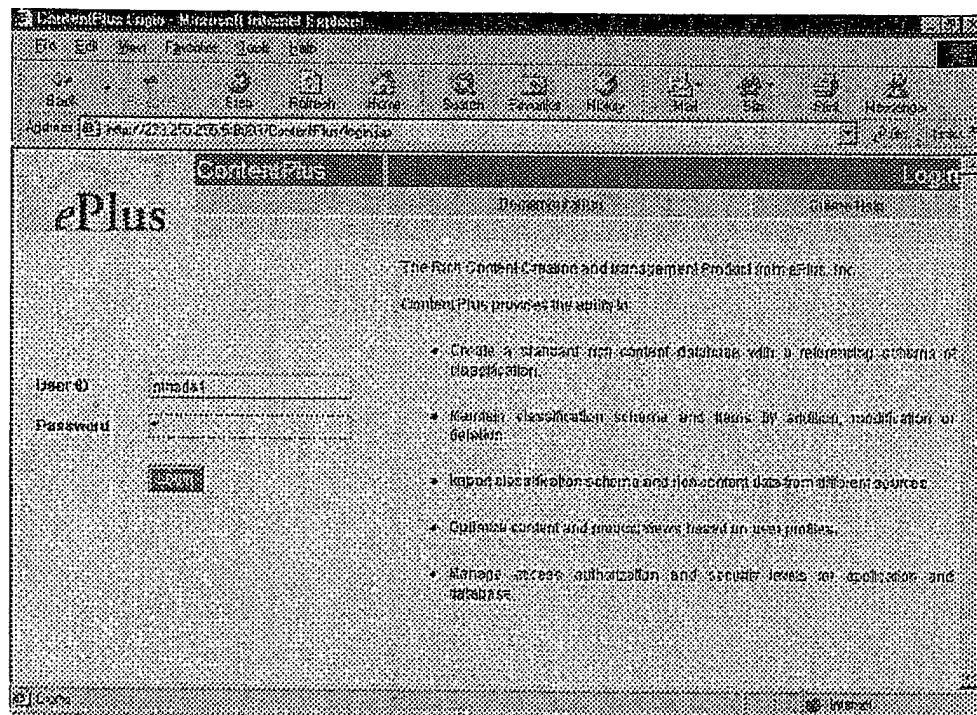
Your ContentPlus System Administrator provides you the Uniform Resource Locator (URL) of your organization's ContentPlus site along with your ContentPlus login name and password.

Your login information is used to verify your access permissions and to control the functions you can see and perform in ContentPlus.

Logging into ContentPlus is easy. After you access the ContentPlus Login page, simply enter your login name and password.

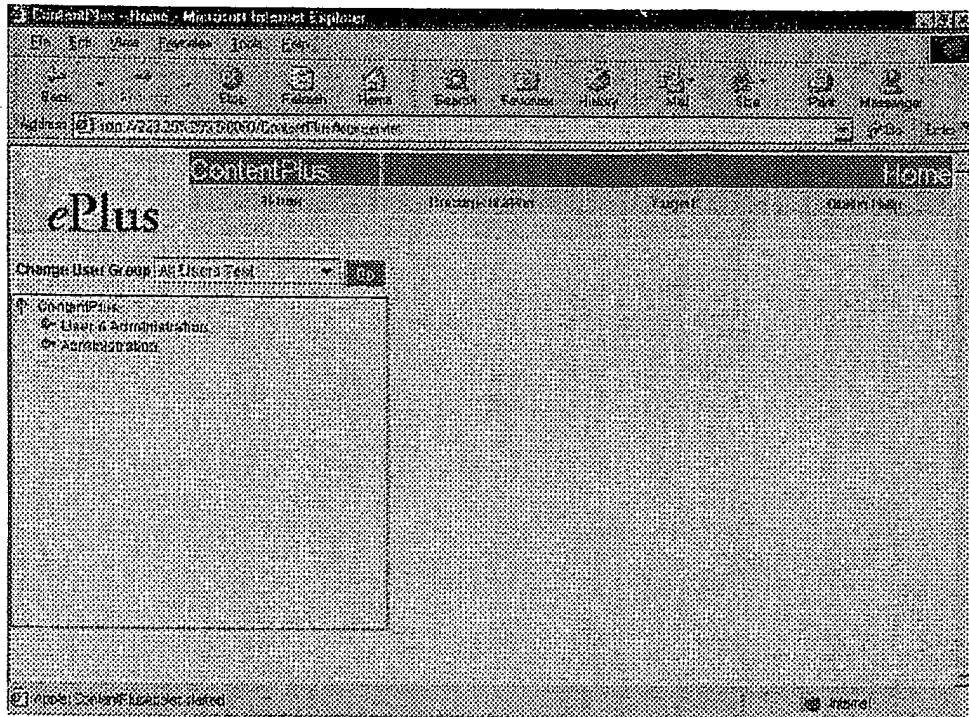
2.1.1 Logging into ContentPlus Site

1. Launch your browser software, and type the URL of your organization's ContentPlus site. The ContentPlus login page for your organizations' site appears.



2. From the ContentPlus login page, in the **User ID** field, enter your ContentPlus site user id.
3. Similarly, in the **Password** field, enter your site password. The password will be encrypted and therefore it will show as asterisk “*”.

4. Click on the **Login** button. The ContentPlus home page, which is the central screen of ContentPlus appears.



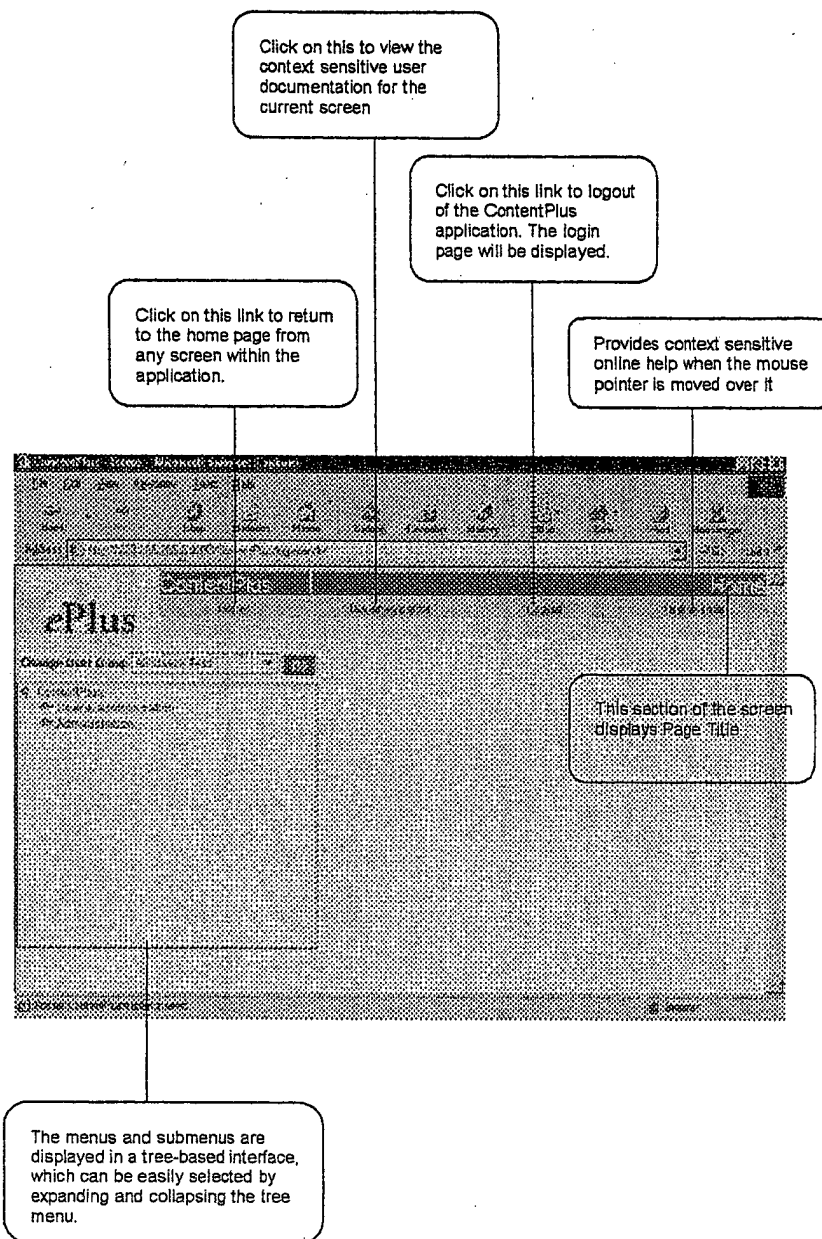
2.1.2 The ContentPlus Home Page

Logging into the ContentPlus site displays the ContentPlus home page. The home page provides access to a range of functions available in the application.

Note: The navigation button viz. Back, Forward, Refresh, Home etc. present on the browser's toolbar must not be used for navigation. Always ensure that the navigation buttons provided on the application interface are used to navigate within the application.

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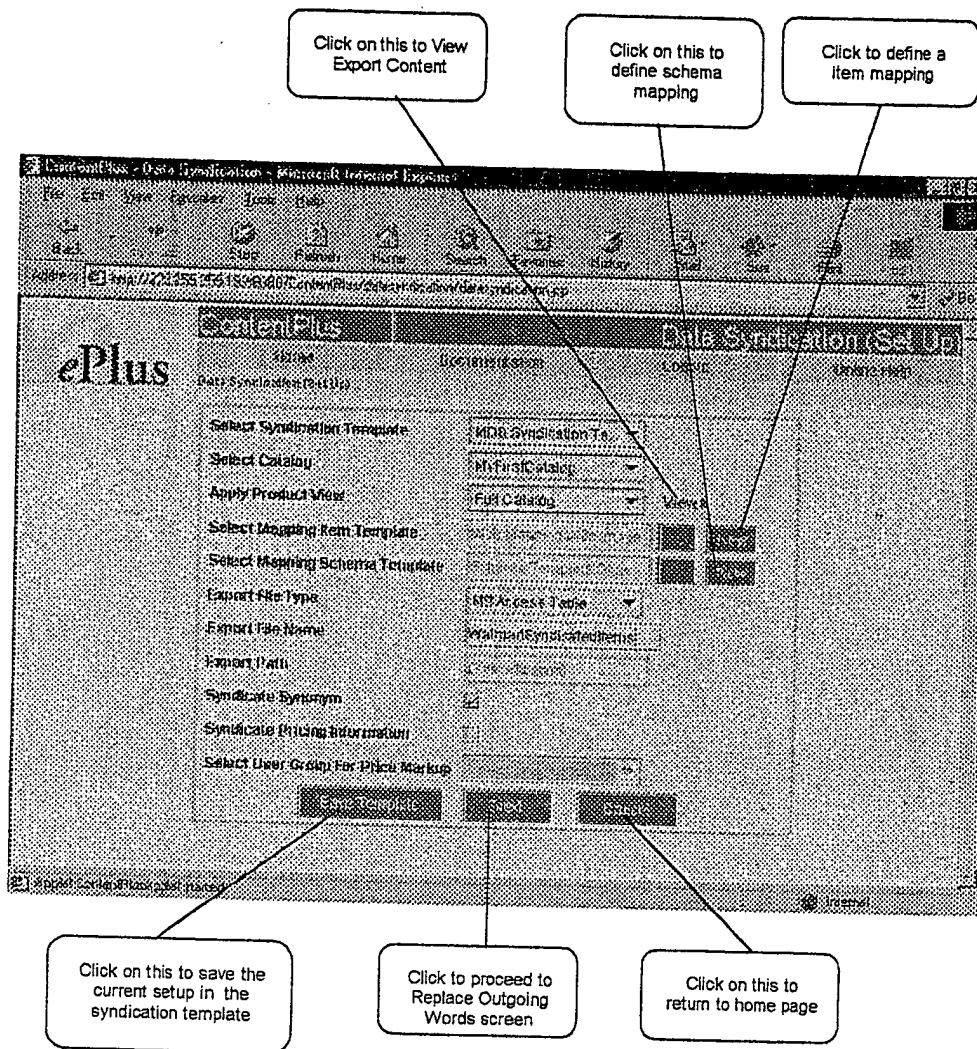
3 Data Syndication

Data Syndication consists of exporting catalogs to various customers. An entire catalog or a specific product view of the catalog can be exported to a customer. Sets of wizard-like GUI screens are provided to facilitate export. The user will specify the user group (shopper) and the catalog for syndication.

User can use audit reports to view details about each export process. An option to view the report in a printer-friendly format is provided.

3.1 Data Syndication

1. Select Administration → Data Syndication → Data Syndication in the tree menu on the home page, the Data Syndication (Set Up) screen will be displayed.



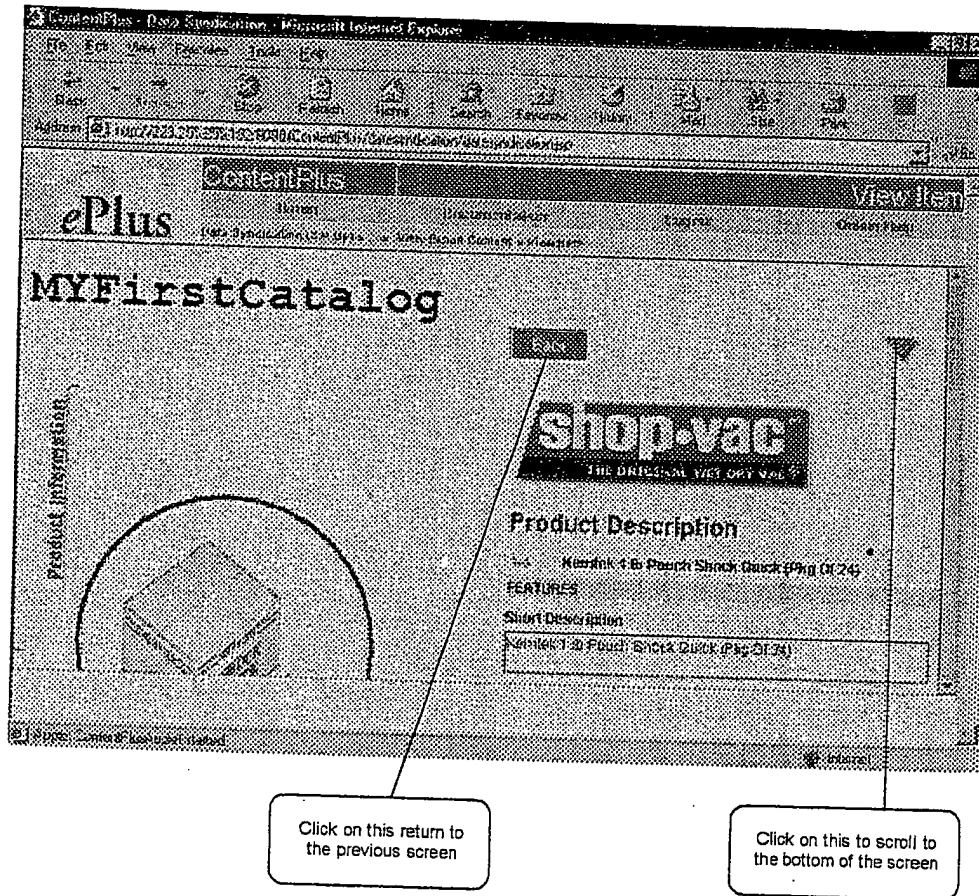
- From the **Select Syndication Template** drop-down list, select the syndication template for which the outgoing items are to be exported.
- From the **Select Catalog** drop-down list, select the catalog name to which the selected outgoing templates will be assigned.
- From the **Apply Product View** drop-down list, select the product view (default is Full Catalog).
- Click on the **View It** link, the View Export Content screen will be displayed.

The screenshot shows the ePlus application interface. On the left is a schema class tree. The main area displays a list of items with columns for Item ID, Item Name, and Item Description. Callouts point to various controls:

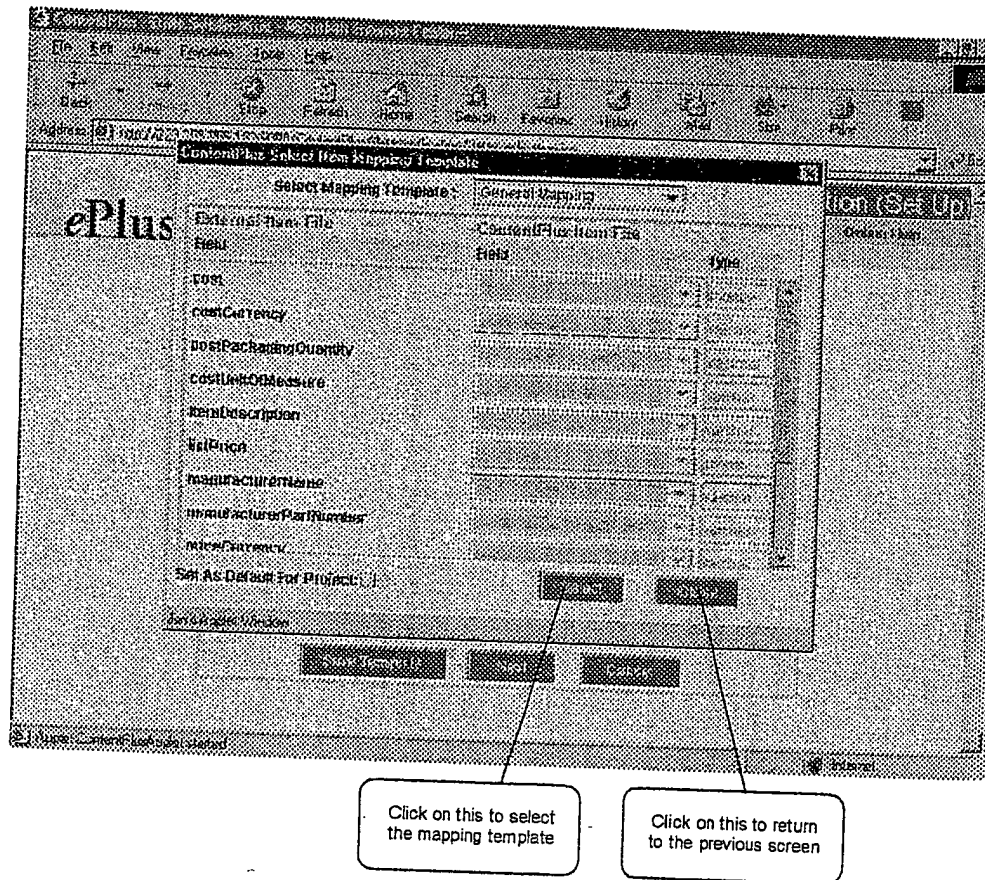
- Adjust Row Height:** Points to the row height adjustment handle in the table.
- Click on this to select all the Items in the List:** Points to the 'Select All' button.
- Remove filter to display all the records:** Points to the 'Remove Filter' button.
- Click on this to scroll to the record specified in the view field:** Points to the 'Go to Record' button.
- Click on this to View the Item Details:** Points to the 'View Item Details' button.
- Click on this to return to the previous screen:** Points to the 'Back' button.

Item ID	Item Name	Item Description
127207	Kentex 1 1/2 Pouch Shock	
127208	Kentex 15 lb Ph Minus Dry	
127209	Kentex 15 lb Ph Plus	
781210	Kentex 72 oz Sugar Cane	
781211	Kentex 27 oz Sugar Cane	
781212	Kentex 32 oz Urea Chloride	
781213	Kentex 32 oz Urea Chloride	
781214	Kentex 32 oz Urea Chloride	
781215	Kentex 32 oz Urea Chloride	
781216	Kentex 32 oz Urea Chloride	
781217	Kentex 32 oz Urea Chloride	
781218	Kentex 32 oz Urea Chloride	
781219	Kentex 32 oz Urea Chloride	
781220	Kentex 32 oz Urea Chloride	

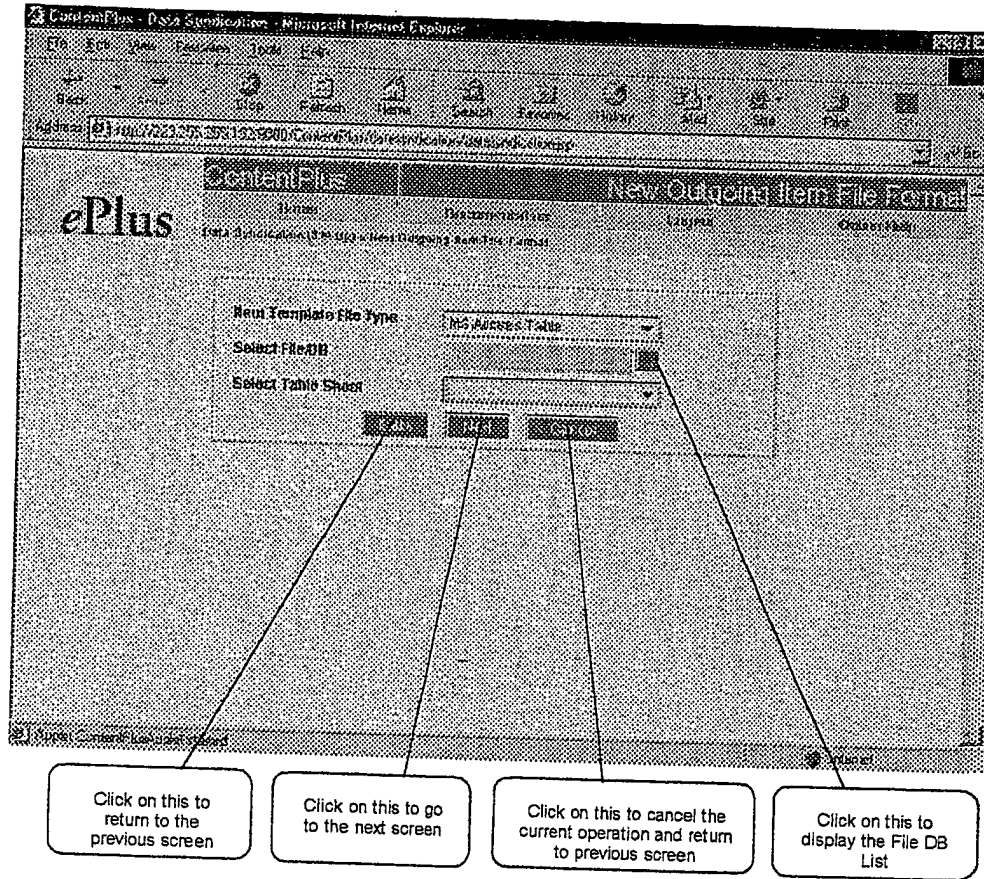
- Expand the schema class tree if needed, and click on the class in the left pane. The list of items under the selected class will be displayed in the right pane.
- Click on the **Item ID** link, to view the item details as shown below



8. Click on the **Down Arrow** icon to scroll to the bottom of the screen. Similarly click on the **Up Arrow** icon to scroll to the top of the screen.
9. Click on the **Back** button to return to the the View Export Content screen.
10. In View Export Content screen click on the **Back** button to return to the Data Syndication (Set Up) screen.
11. Click on the **Select Mapping Item Template** button, the Select Item Mapping Template dialog box will appear.

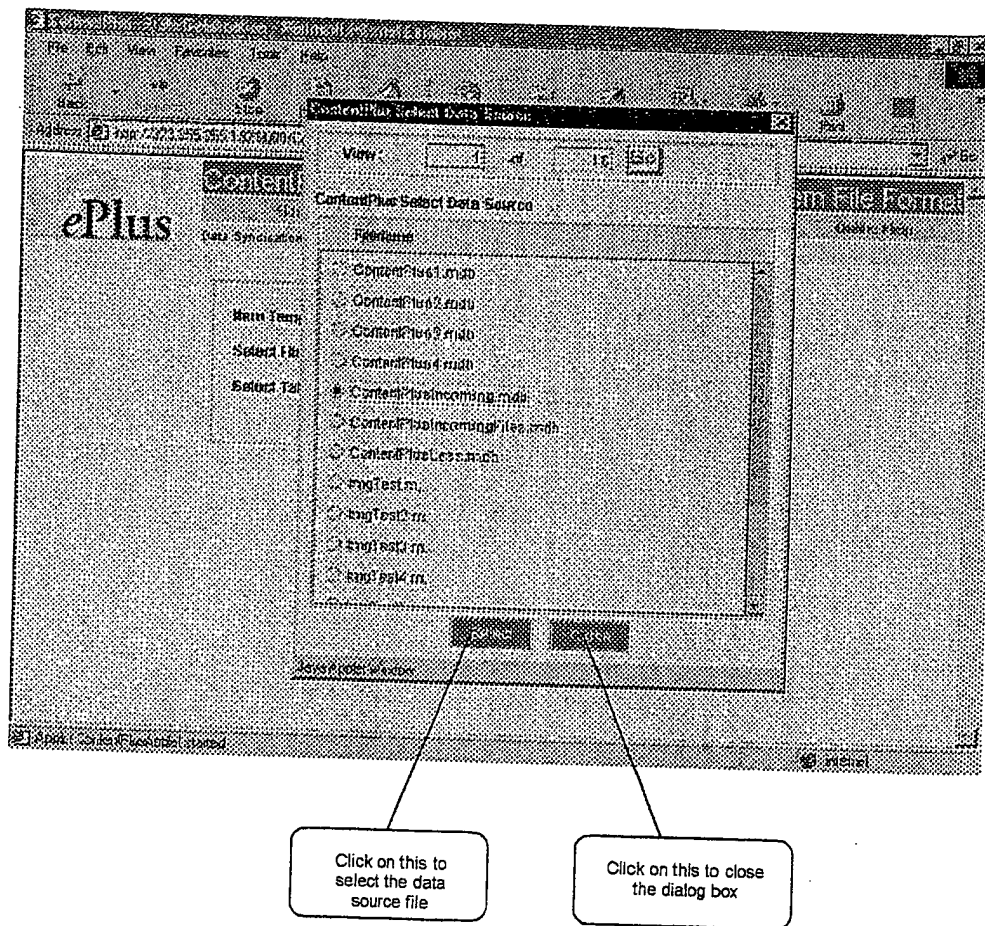


12. From the **Select Mapping Template** drop-down list, select the mapping template. The corresponding item mapping information will be displayed as shown above.
13. Click on the **Select** button, to select the mapping template and return to the Data Syndication (Set Up) screen.
14. Click on the **Close** button, to return to the Data Syndication (Set Up) screen without selecting the mapping template.
15. In case, a new item mapping is to be defined, click on the **New Mapping Item Template** button. The New Outgoing Item File Format screen will be displayed.

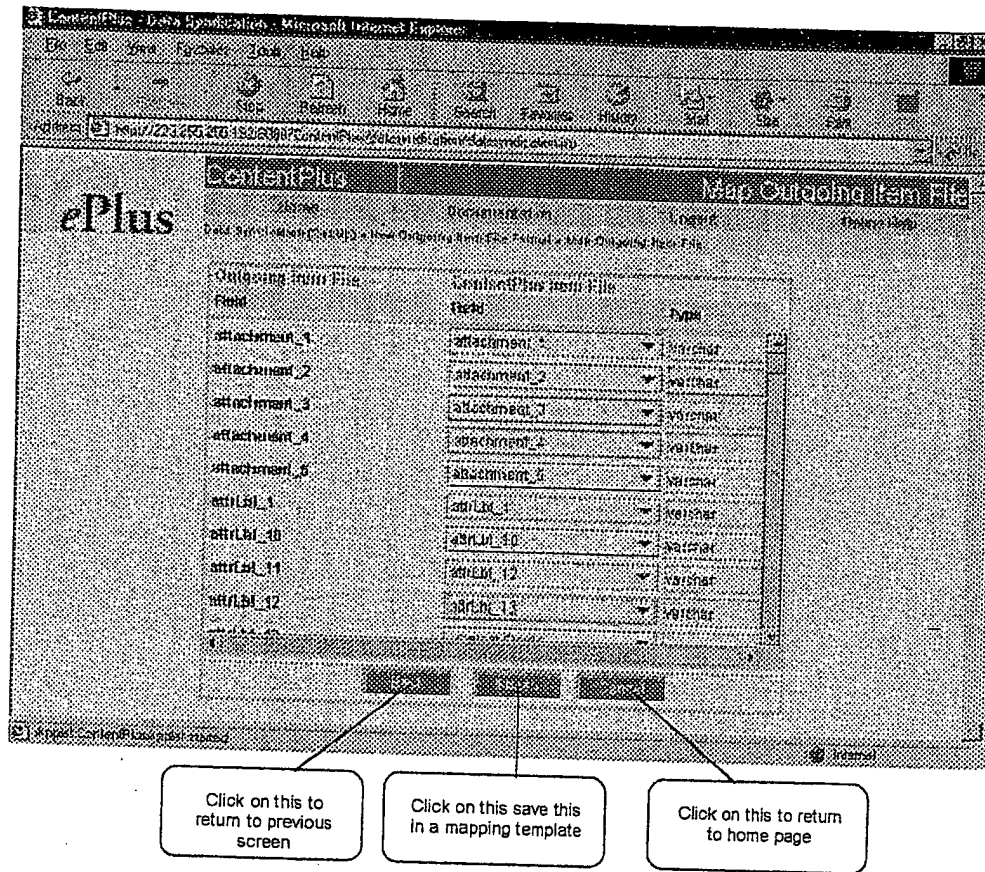


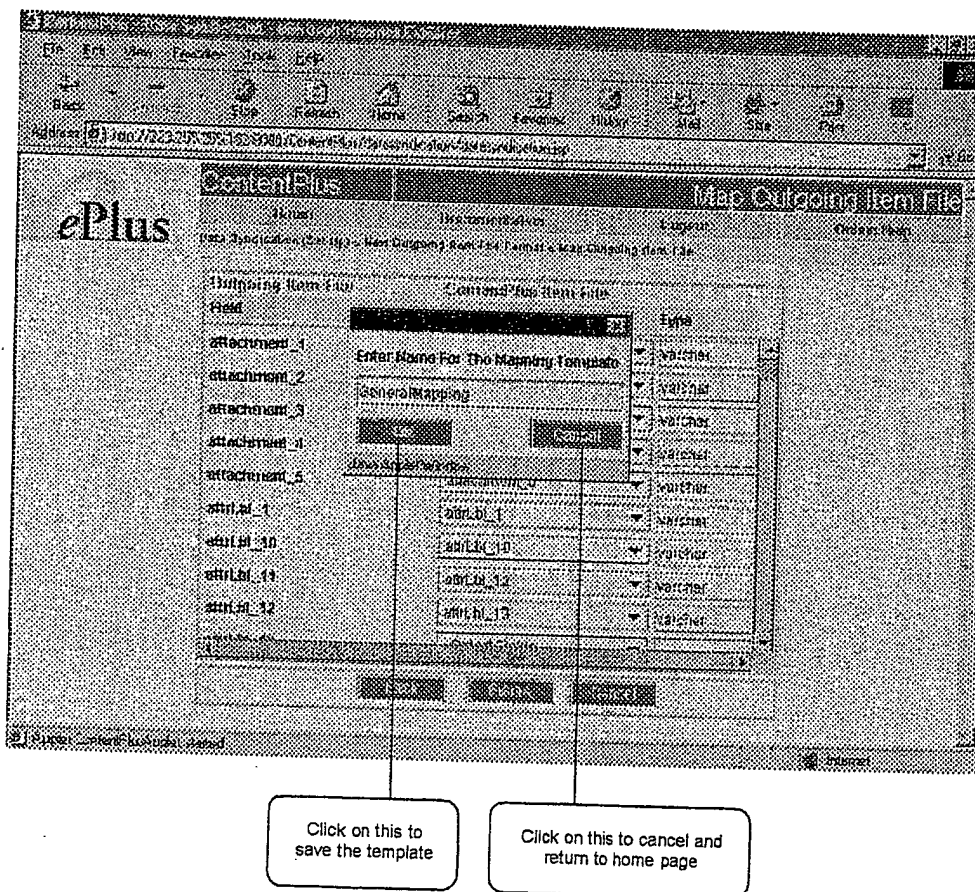
16. From **Item Template File Type** drop-down list, select the template file format. You may select from any one of the four file formats viz. MS Access (.MDB), MS Excel (.XLS), Comma Separated (.CSV), and XML (.XML).

17. Click on the **Select File/DB** button, the **Select Data Source** dialog box will appear. The dialog box will show a list of files based on the selected file format.



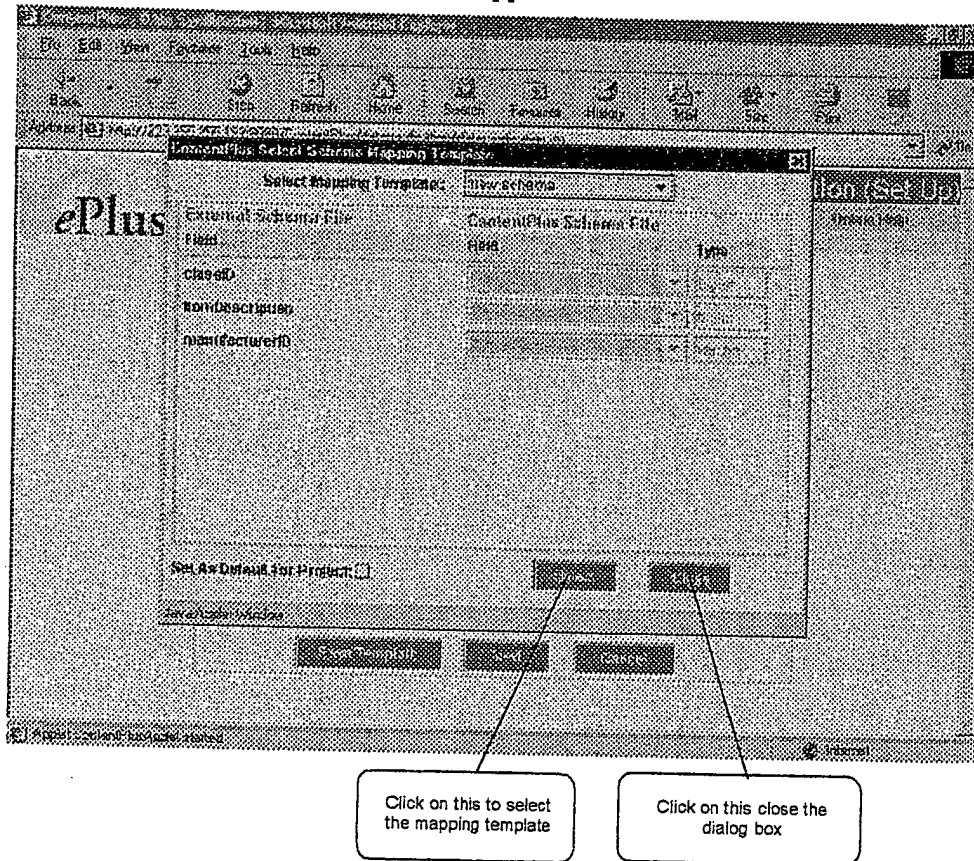
18. Select the data source file containing the items to be exported. Click on the **Select** button, this will select the data source file and return to the New Outgoing Item File Format screen.
19. Click on the **Close** button, to return to the New Outgoing Item Format screen without selecting the data source file.
20. From the **Select Table/Sheet** drop-down list, select the appropriate table or sheet containing the items
21. In New Outgoing Item File Format screen click on the **Cancel** button to return to the Home page. Clicking on the **Back** button will return to the Data Syndication (Set Up) screen.
22. Click on the **Next** button to proceed to the Map Outgoing Item File screen.





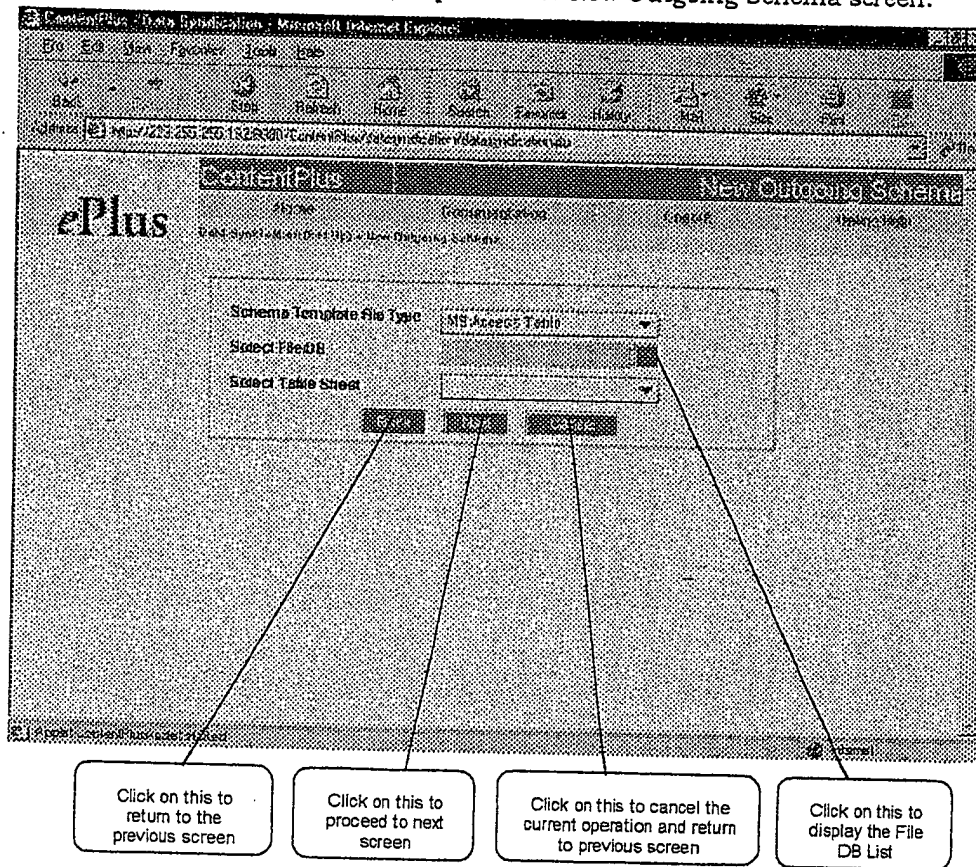
23. Map each field of the outgoing template with the standard ContentPlus Item File fields.
24. Click on the **Finish** button, **Enter Name For The Mapping Template** dialog box will appear.
25. In the **Enter Name For The Mapping Template** field, enter a name for the mapping template. Click on the **OK** button, to return to the Data Syndication (Set Up) screen. Click on the **Cancel** button, the dialog box will be cleared and you can change the mappings if required.
26. In Map Outgoing Item File screen click on the **Cancel** button to return to the Home page. Click on the **Back** button will return to the New Outgoing Item File Format screen.

27. Click on the **Select Mapping Schema Template** button, the Select Schema Mapping Template dialog box will appear.



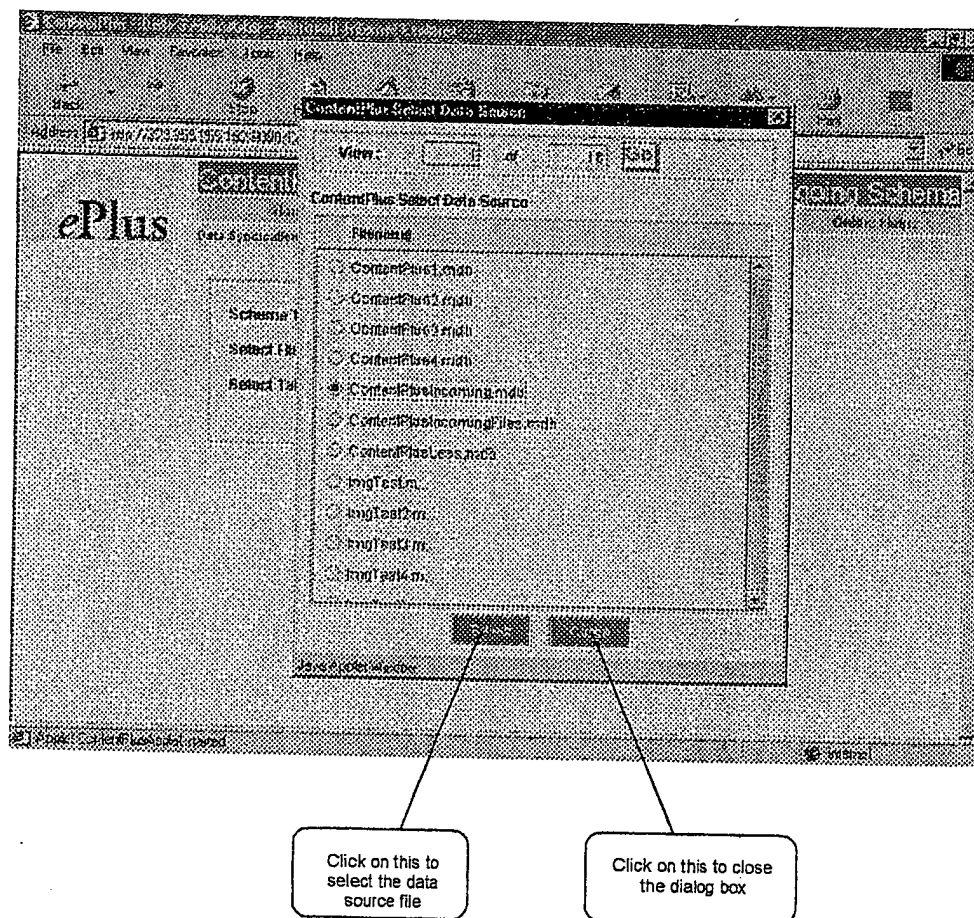
28. From the **Select Schema Mapping Template** drop-down list, select the mapping template. The corresponding schema mapping information will be displayed as shown above.
29. Click on the **Select** button, this will select the schema mapping template and return to the Data Syndication (Set Up) screen.
30. The **Close** button will return to the Data Syndication (Set Up) screen without selecting the mapping template.

31. In case, a new schema mapping is to be defined, click on the **New Mapping Schema Template** button, to proceed to New Outgoing Schema screen.



32. From **Schema Template File Type** drop down list, select the schema template file type. You may select from any one of the four file formats viz. MS Access (.MDB), MS Excel (.XLS), Comma Separated (.CSV), and XML (.XML).

33. Click on the **Select File OB** button, the **Select Data Source** dialog box will be displayed. The dialog box will show a list of files based on the selected file format.



34. Select the data source file containing the schema definition to be exported. Click on the **Select** button, this will select the data source file and return to the New Outgoing Schema screen.
35. Click on the **Close** button, to return to the New Outgoing Schema screen without selecting the data source file.
36. From the **Select Table/Sheet** drop-down list, select the appropriate table or sheet containing the items
37. In New Outgoing Schema screen click on the **Cancel** button to return to the Home page. Click on the **Back** button will return to the Data Syndication (Set Up) screen.
38. Click on the **Next** button to proceed to the Map Outgoing Schema File screen.

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39. Map each field of the external schema file with ContentPlus schema file fields.

ContentPlus **Map Outgoing Schema File**

External Schema File

Field
Title
Arrival
Arriving/Approach
Call/Arrival Log
ClassID
Classpath
Cost
CostCurrency
CostPackaging/Quantity
CostLanded/Measure

ContentPlus Schema File

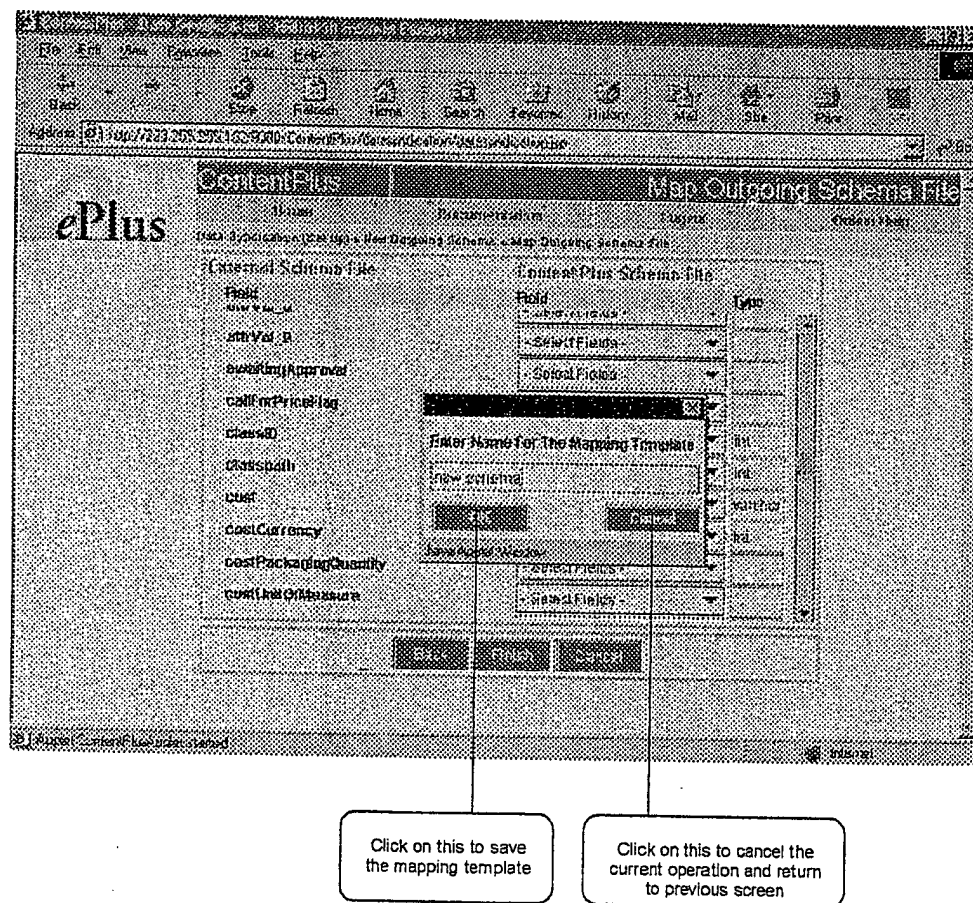
Field	Type
Select Fields	
Select Fields	
Select Fields	
ClassID	int
Select Fields	
Select Fields	
ParentClassID	int
ChildCount	int
Classname	varchar

Back Save Cancel

Click on this to return to previous screen

Click on this to save the mapping template

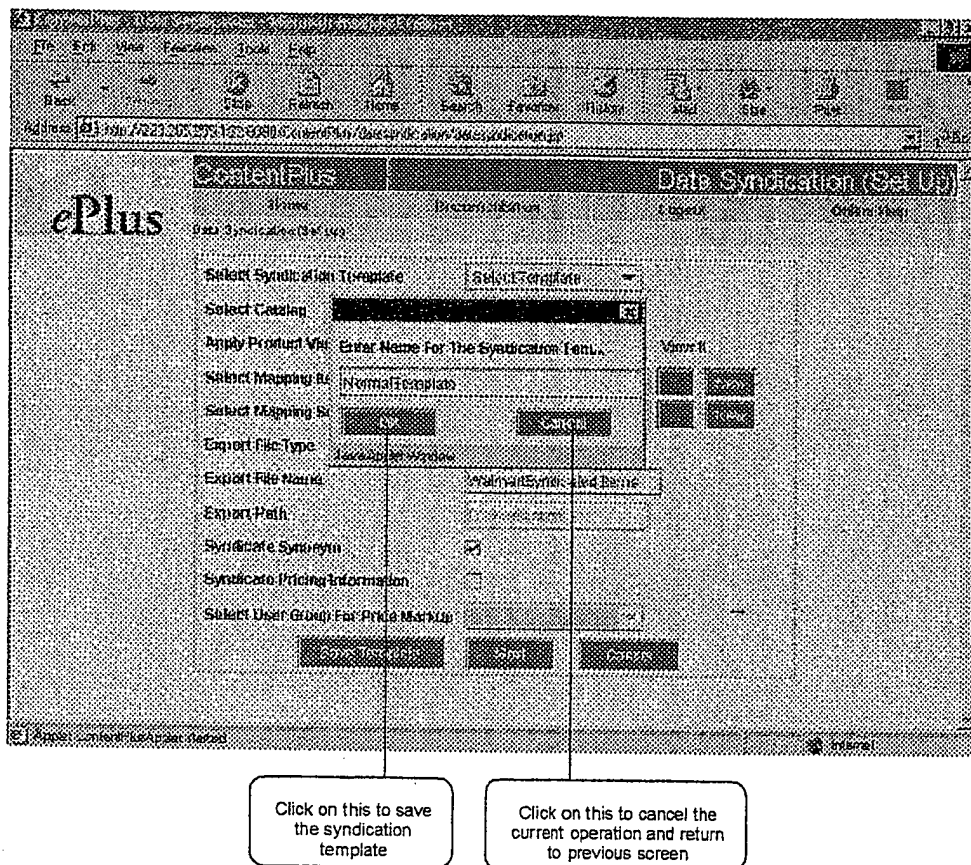
Click on this to return to home page



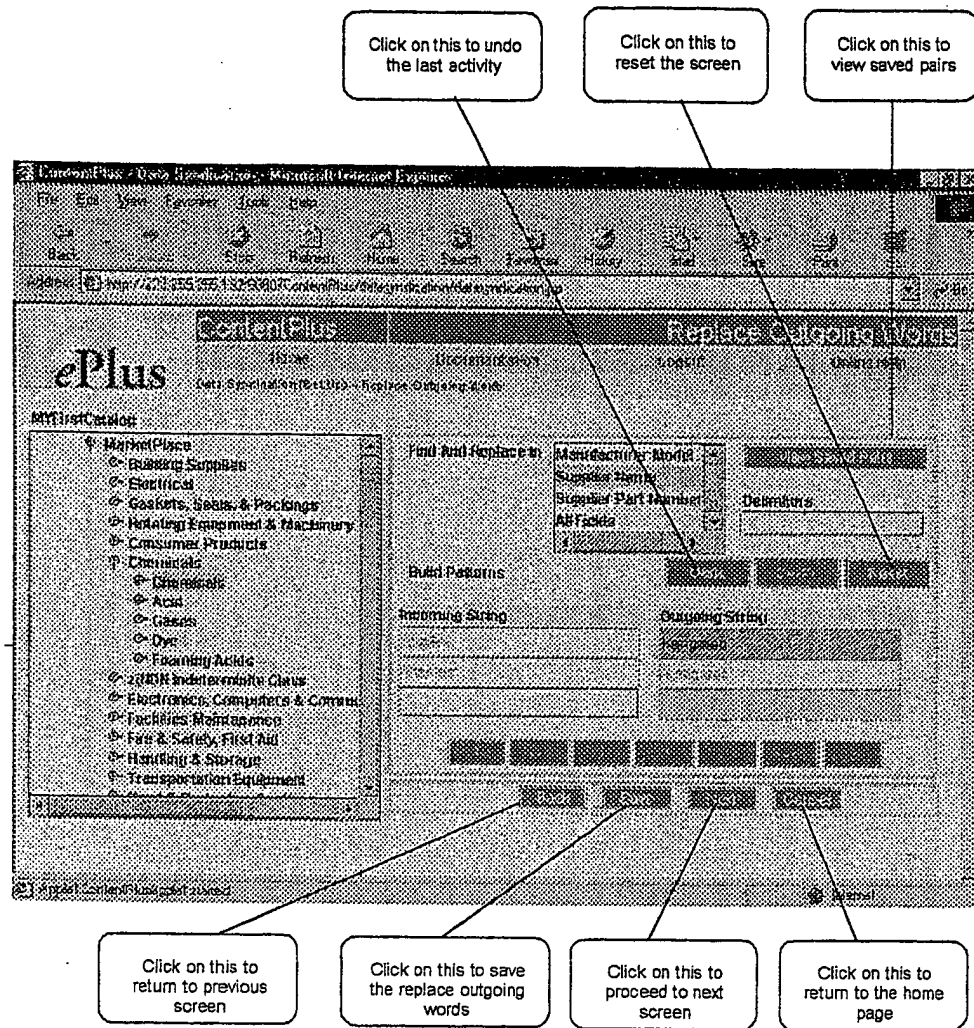
40. Click on the **Finish** button, **Enter Name For The Mapping Template** dialog box will appear.
41. In the **Enter Name For The Mapping Template** field, enter a name for the mapping template. Click on the **OK** button, you will return to the Data Syndication (Set Up) screen. Clicking on the **Cancel** button, the dialog box will be cleared and you can change the mappings if required.
42. In Map Outgoing Schema File screen click on the **Cancel** button to return to the Home page. Click on the **Back** button will return to the New Outgoing Schema screen.
43. From the **Export File Type** drop-down list, select the export file format. You may select from any one of the four file formats viz. MS Access (.MDB), MS Excel (.XLS), Comma Separated (.CSV), and XML (.XML).
44. In the **Export File Name** field, enter the export file name.
45. Select **Syndicate Synonym** checkbox, if synonyms must be syndicated.








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46. Select **Syndicate Pricing Information** checkbox, if pricing information must be syndicated.
47. From the **Select User Group For Price Markup** drop-down list, select the user group for which the price markup information must be syndicated.
48. Click on **Save Template** button, **Enter Name For The Syndication Template** dialog box will appear.

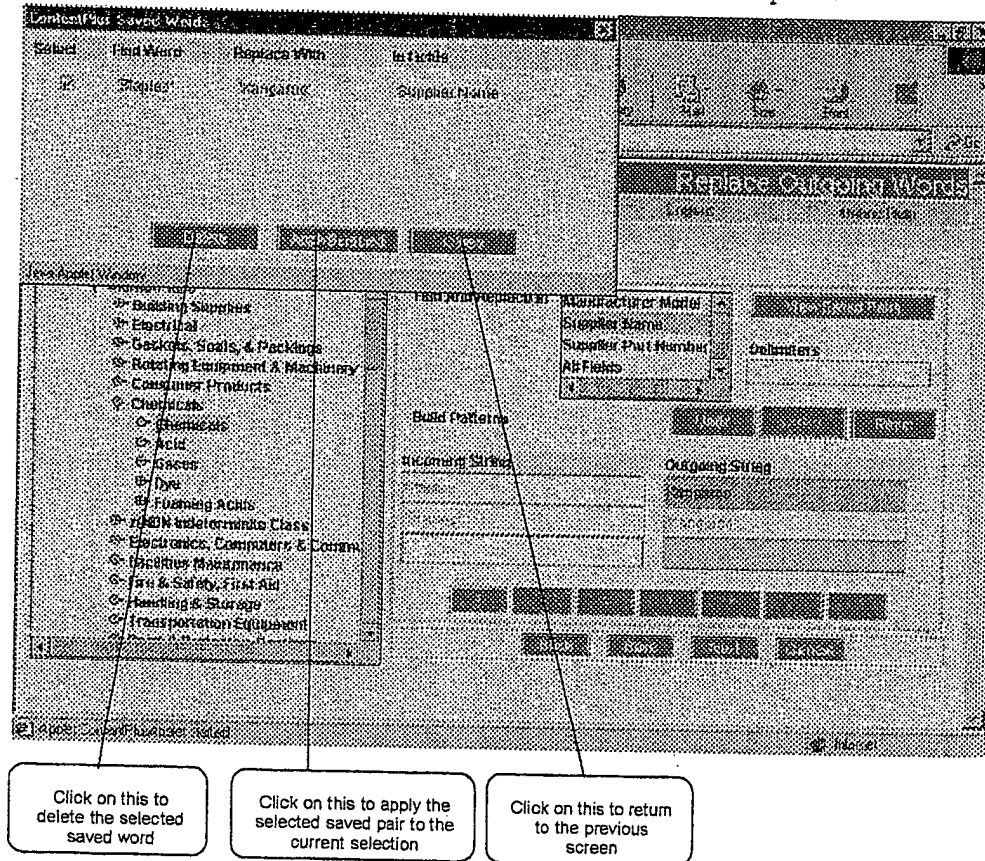


49. In the **Enter Name For The Syndication Template** field, enter a name for the syndication template. Click on the **OK** button, you will return to the Data Syndication (Set Up) screen. Click on the **Cancel** button, the dialog box will be cleared and you can change the data syndication setup.
50. In Data Syndication (Set Up) screen, click on the **Cancel** button to return to the home page.
51. Click on the **Next** button to proceed to Replace Outgoing Words screen.



-  Build a literal pattern for input string
-  Build a literal pattern, consisting of the complete selected text
-  Append a space to the current pattern
-  Build a numeric pattern, for input string
-  Build the pattern string, comprising of a wildcard character at the specified position
-  Build the pattern string, comprising of a wildcard characters starting from the specified position
-  Split the pattern at the current cursor position

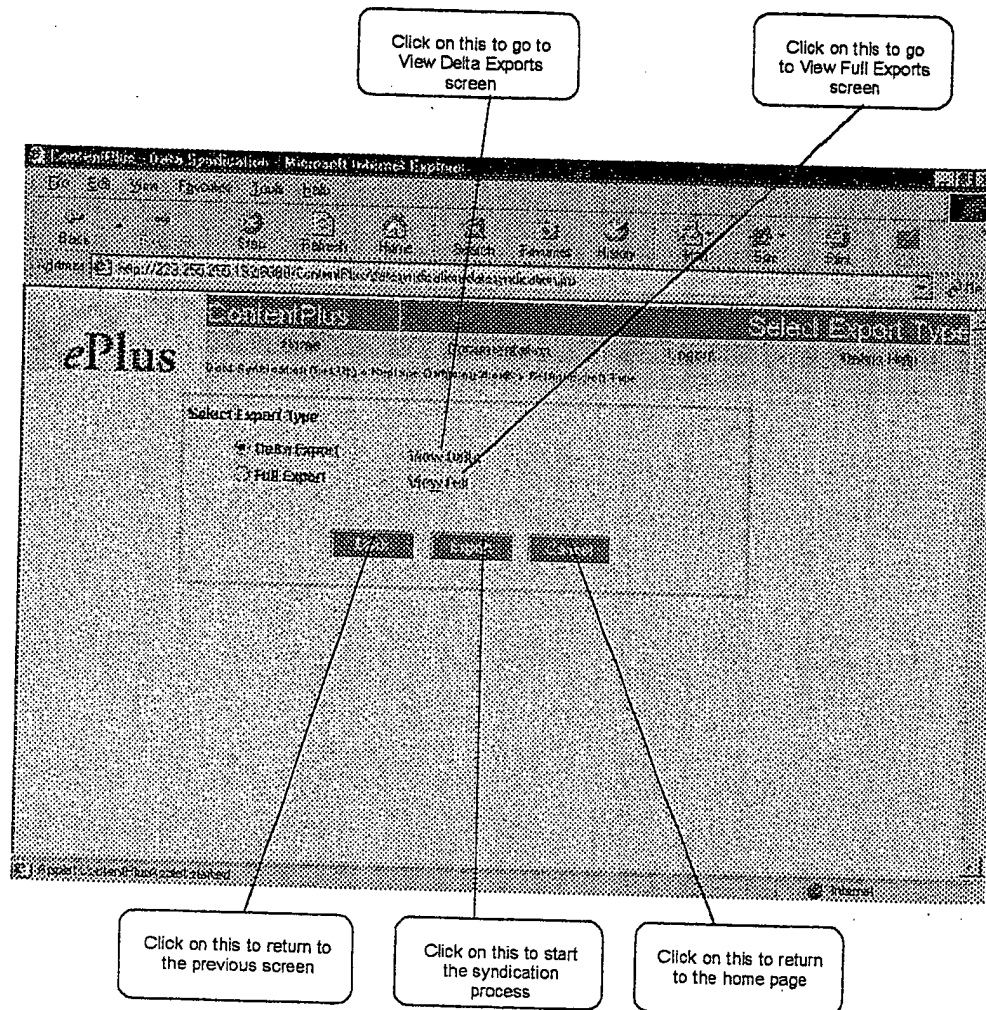
52. On this screen, define incoming patterns and outgoing patterns for selected fields from the **Find and Replace In** list. During export the selected field values will be replaced with outgoing patterns if they contain input patterns. The matching of input patterns in the field value is influenced by the delimiters that are specified in the **Delimiters** field.
53. Click on the **Undo** button to undo the last activity. Clicking on **Reset** button will reset the screen.
54. Click on the **Save** button to save the find and replace word pairs.
55. Click on the **View Saved Pairs** button to view saved word pairs.



56. To delete specific saved word(s), select the respective pair from **Saved Word** screen, and click on the **Delete** button.
57. Click on the **Apply Selection** button, to select the save word to be applied to the current selection.
58. Click on the **Close** button, to return to the Replace Outgoing Words screen.

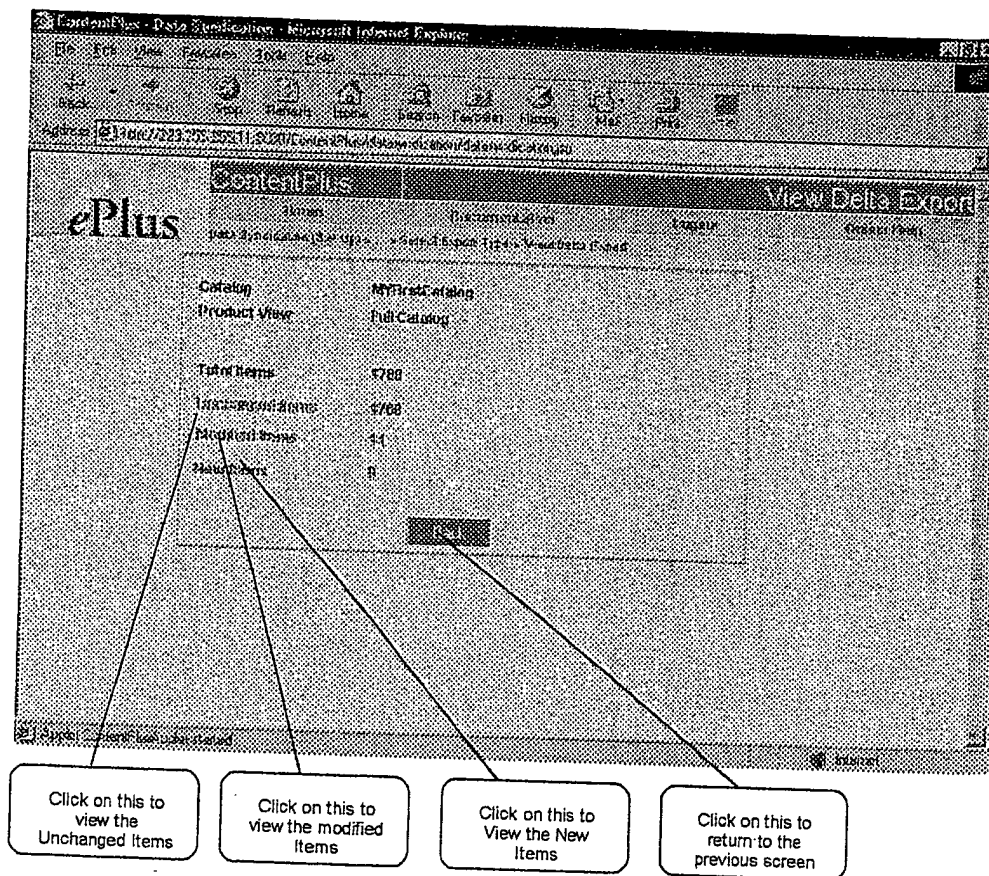
59. In Replace Outgoing Words screen click on the **Back** button to return to the Data Syndication (Set Up) screen. Click on the **Cancel** button to return to the home page.

60. Click on **Next** button to proceed to the Select Export Type screen.

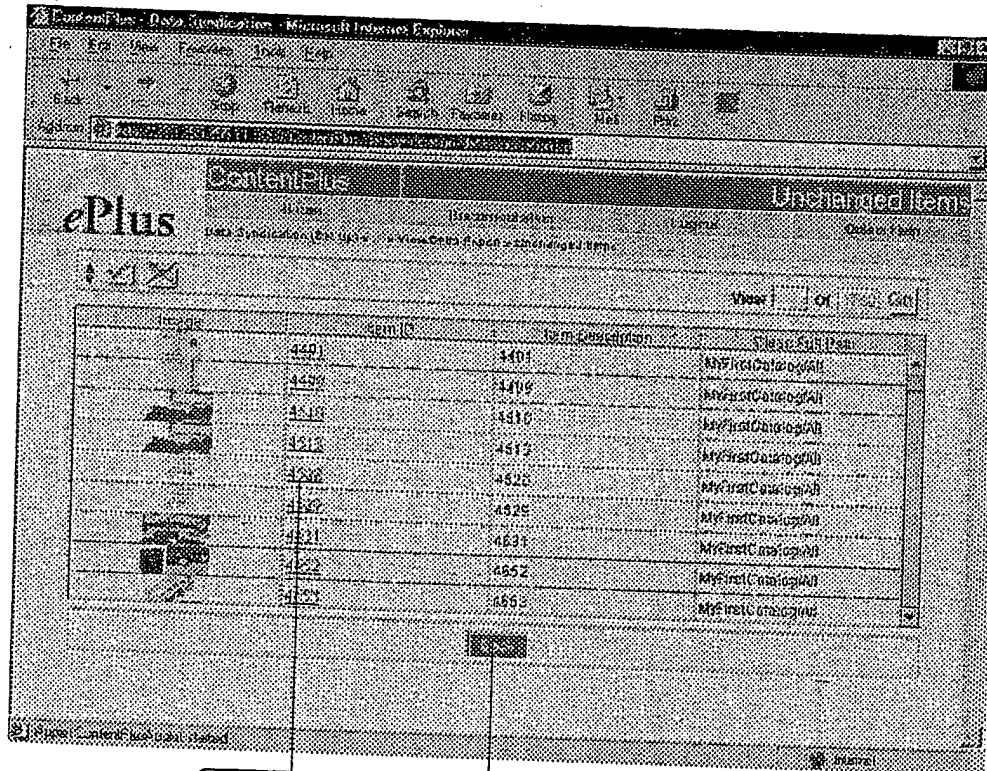


61. Delta export will export new and modified items only. A complete export will export all the items.

62. Click on the **View Delta** link, the View Delta Export screen will be displayed. The View Delta Export screen will display the count of unchanged items, new items and modified items. During delta exports, selected items for the product view will be compared against a previous export of the same product view.



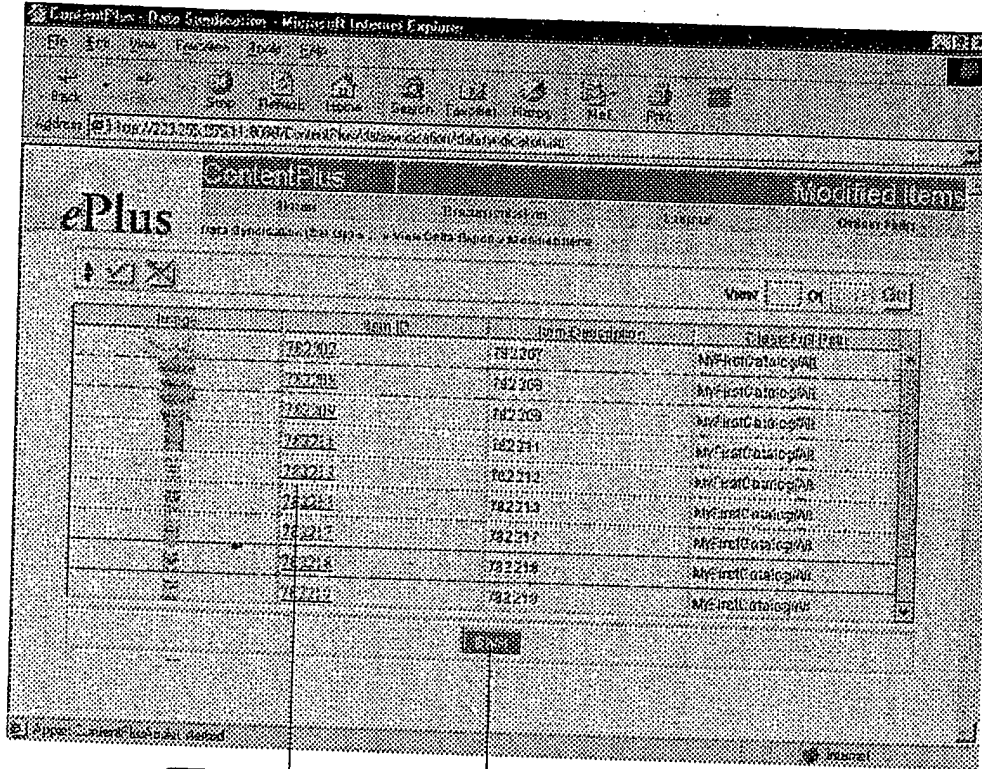
63. Click on the **Unchanged Items** link, the Unchanged Items screen will be displayed.



Click on this to
View the Item
Details

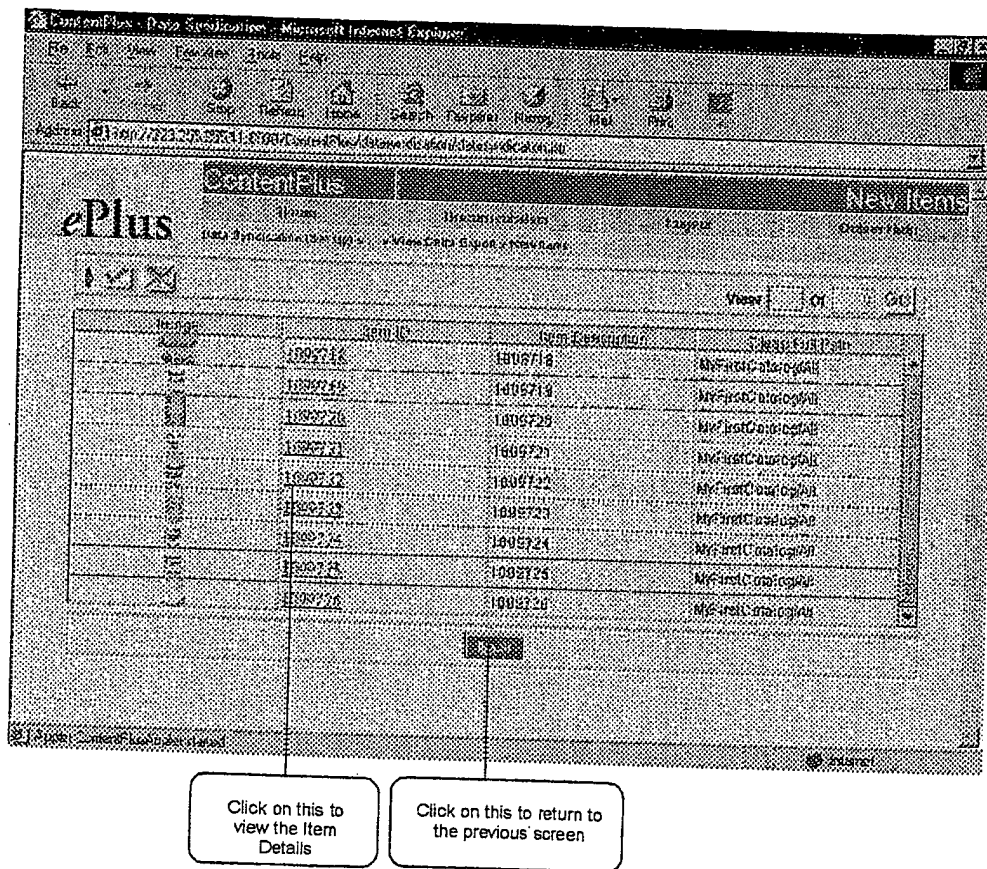
Click on this to return to
the previous screen

64. Click on the **Item ID** link, to view the item details. Click on **Back** button to return to View Delta Export screen.
65. Click on the **Modified Items** link, the Modified Items screen will be displayed.



66. Click on the **Item ID** link, to view the item details. Click on **Back** button to return to View Delta Export screen.

67. Click on the **New Items** link, the New Items screen will be displayed.



68. Click on the **Item ID** link, to view the item details. Click on **Back** button to return to View Delta Export screen.
69. In the View Delta Export screen, click on **Back** button to return to Select Export Type screen.
70. In the View Delta Export screen, click on the **View Full** link. The View Full Exports screen will be displayed.

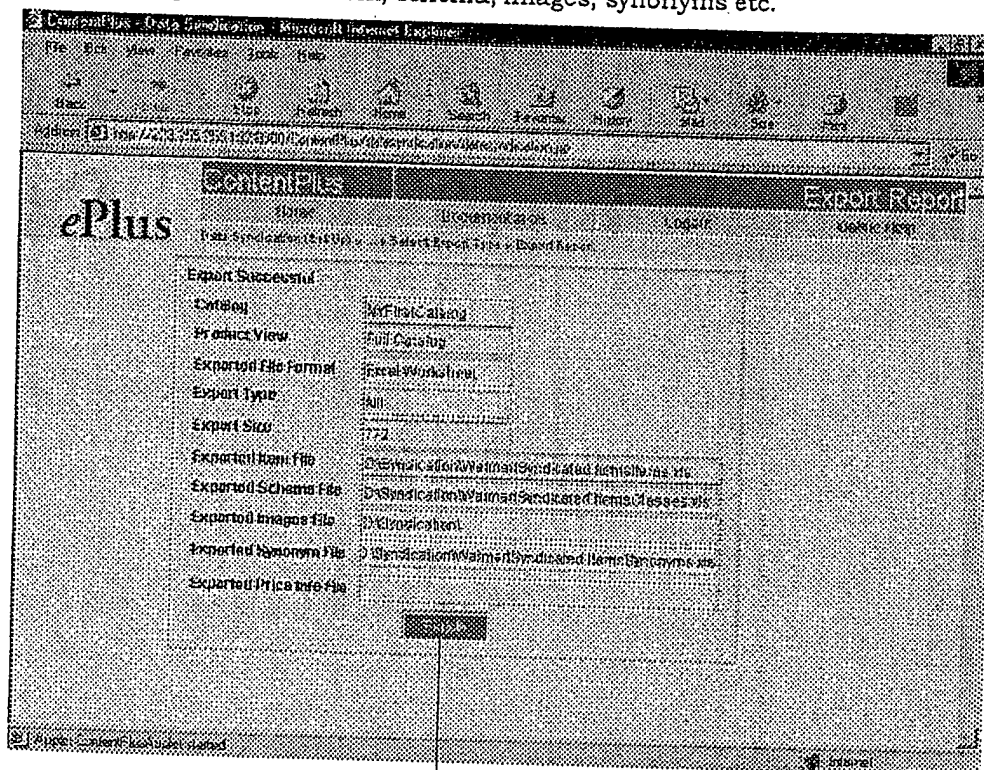
The screenshot shows the ePlus software interface. On the left is a tree view of schema classes. The main area displays a list of items with columns for Item ID, Item Name, and Item Description. Callouts point to various UI elements:

- Adjust Row Height**: Points to the row height adjustment handle.
- Click on this to select all the items in the List**: Points to the 'Select All' button.
- Remove the filter to display all records**: Points to the 'Remove Filter' button.
- Click to scroll to the record specified in the view field**: Points to the 'Go to Record' button.
- Click on this to view the Item Details**: Points to the 'Item ID' link in the list.
- Click on this to return to the previous screen**: Points to the 'Back' button.

Item ID	Item Name	Item Description
282207	Kemtek 1.5 lb Pouch Stock	
282208	Kemtek 1.5 lb Ph Minus Dry	
282209	Kemtek 1.5 lb Ph Plus	
282210	Kemtek 1.5 lb Ph Plus Cn	
282211	Kemtek 1.5 lb Ph Plus Cn	
282212	Kemtek 1.5 lb Ph Plus Cn	
282213	Kemtek 1.5 lb Ph Plus Cn	
282214	Kemtek 1.5 lb Ph Plus Cn	
282215	Kemtek 1.5 lb Ph Plus Cn	
282216	Kemtek 1.5 lb Ph Plus Cn	
282217	Kemtek 1.5 lb Ph Plus Cn	
282218	Kemtek 1.5 lb Ph Plus Cn	
282219	Kemtek 1.5 lb Ph Plus Cn	
282220	Kemtek 1.5 lb Ph Plus Cn	

71. Select and expand the appropriate schema class in the left pane, to view the items under it. The list of items under the selected class will be displayed in the right pane.
72. Click on the **Item ID** link, to view the item details.
73. Click on the **Back** button to return to the Select Export Type screen.
74. In the Select Export Type screen, click on the **Back** button to return to the Replace Outgoing Words screen. Click on the **Cancel** button to return to the home page.
75. Select an appropriate export type before starting the syndication process. The delta export will export new and modified items only. A full export will export the entire catalog.
76. Click on the **Export** button to start the syndication process. On completion of the syndication process, the Export Report screen will be displayed. The A

Export report displays the export related information including the locations of the export files for item, schema, images, synonyms etc.

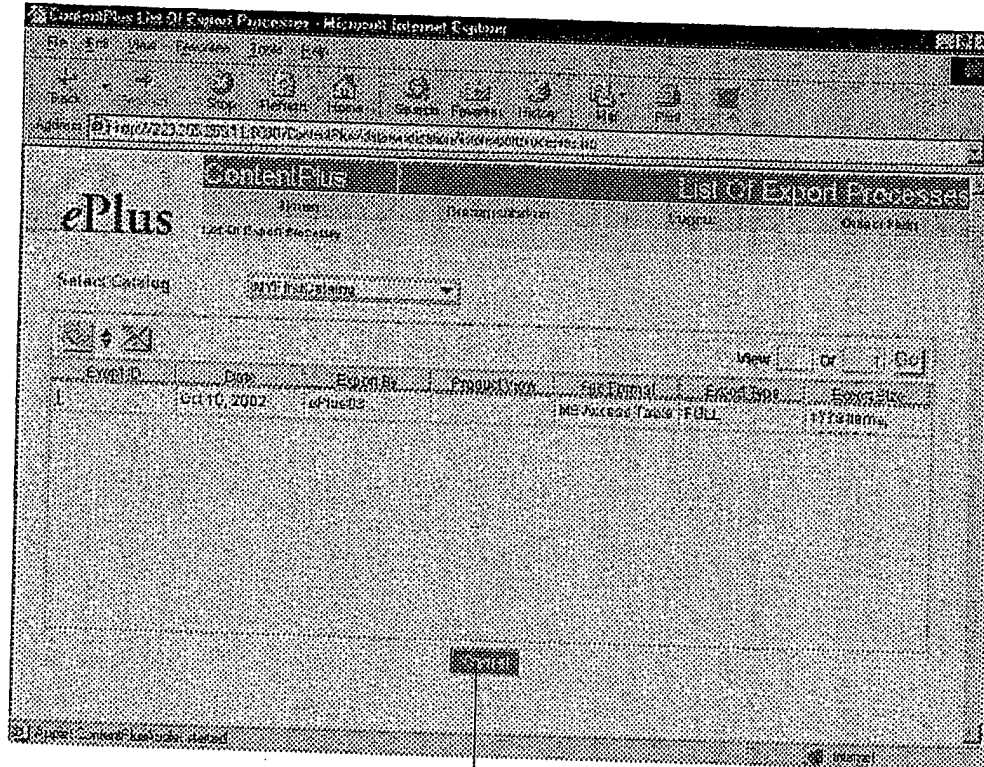


77. Click on the **Finish** button to return to the home page.

3.2

List of Export Processes

1. Select Administration → Data Syndication → List of Export Processes in the tree menu on the home page. The List of Export Processes screen will be displayed as follows:



Return to Home
Page

ContentPlus		Export Event Details
Home	Administration	Logout
List Of Export Processes - Export Event Details		
Export Event ID	8	
Export By	network	
Catalog	MarketPlace	
ProductView	2	
Exported File Format	ods	
Export Type	delta	
Export Size	55	
Exported Item File	C:\ExportFiles\exportItemFiles	
Exported Schema File	C:\ExportFiles\exportSchemaFiles	
Exported Images File	C:\ExportFiles\imageFiles	
Exported Synonym File	C:\ExportFiles\synonymFiles	
Exported Price Info File	C:\ExportFiles\exportPriceFiles	
Exported Thumbnail Images File		

Return to previous screen

- From the **Select Catalog** drop down box select the catalog name for which the export log is to be viewed.
- Click on the **Printer Friendly Report** icon to print the report of the import log displayed currently.
- Click on the column heading to sort the list in ascending order of the clicked column. Click on the same column heading again, will sort the list in descending order.
- Double click inside a cell, drag the mouse to select the text, and right-click on the cell. A popup menu will appear with two options, which can be used to filter the current list containing the text or not containing the text in the respective column.
- Click on the **Cancel** button to return to the home page.

APPENDIX V – IMPORT EXTERNAL SCHEMA

ContentPlus – Import External Schema User's Guide

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Document Revised: September 16, 2002

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1.3	Contacting ePlus Content Services, Inc.	3
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3	Importing External Schema	8
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3.2	Map Incoming Schema	11
3.3	Append Incoming Schema	12

1 Introduction

1.1 Welcome to ContentPlus

ContentPlus, is a robust, easy-to-use rich content creation and management application that provides users with the ability to:

- ❑ Create a standard rich content database with referencing schema of classification.
- ❑ Maintain classification schema and items by addition, modification or deletion.
- ❑ Import classification schema and rich content data from different sources.
- ❑ Optimize Content and Product Views based on User Profiles and Shopper Groups.
- ❑ Manage Access Authorization and Security Levels for application and database.

1.2 System Requirements

ContentPlus is a web-based, browser-independent application. As a web-based application, ContentPlus requires the Java Runtime Environment (JRE), a standard browser and access to the Internet.

As a browser-independent application, ContentPlus can be accessed with a variety of standard browsers, including Microsoft Internet Explorer and Netscape Navigator. The following are the software and hardware requirements for using ContentPlus.

Software Requirements

- ❑ Java Runtime Environment v 1.4.0 or higher
- ❑ Internet Explorer v. 5.5 or higher
- OR-
- Netscape Navigator v. 6.0 or higher

Hardware Requirements

- ❑ 800 x 600 pixels screen resolution

1.3 Contacting ePlus Content Services, Inc.

Refer to the following sections for information about contacting ePlus, inc. for customer support or sales information.

1.3.1 ePlus, Inc. Headquarters

ePlus, inc. is a leading provider of supply chain management solutions. From integrated financial services, to an end-to-end, web-based procurement application, to a comprehensive, web-based asset management application, to

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unparalleled client services, ePlus, inc. provides its rapidly growing customer base complete supply chain management solutions.

Corporate Headquarters

Address

ePlus, inc.
400 Herndon Parkway
Herndon, VA 20170

Telephone

1-703-264-0770

-or-

1-800-827-5711

Office Hours

Monday to Friday

9:00 A.M. to 5:30 P.M. Eastern Standard Time

2 Getting Started

2.1 Logging into ContentPlus

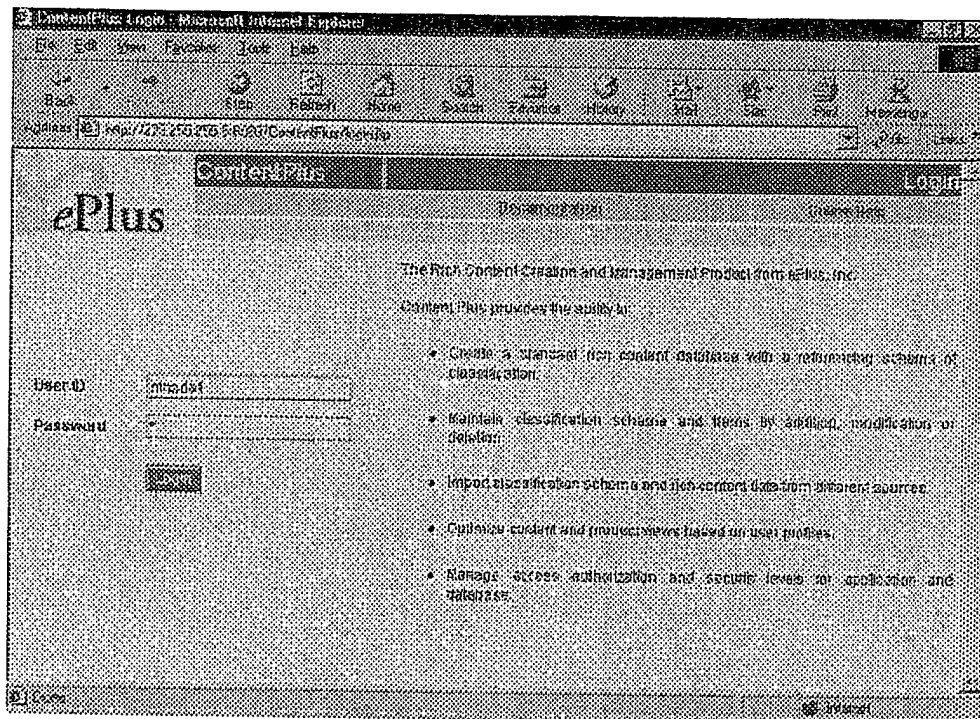
Your ContentPlus System Administrator provides you the Uniform Resource Locator (URL) of your organization's ContentPlus site along with your ContentPlus login name and password.

Your login information is used to verify your access permissions and to control the functions you can see and perform in ContentPlus.

Logging into ContentPlus is easy. After you access the ContentPlus Login page, simply enter your login name and password.

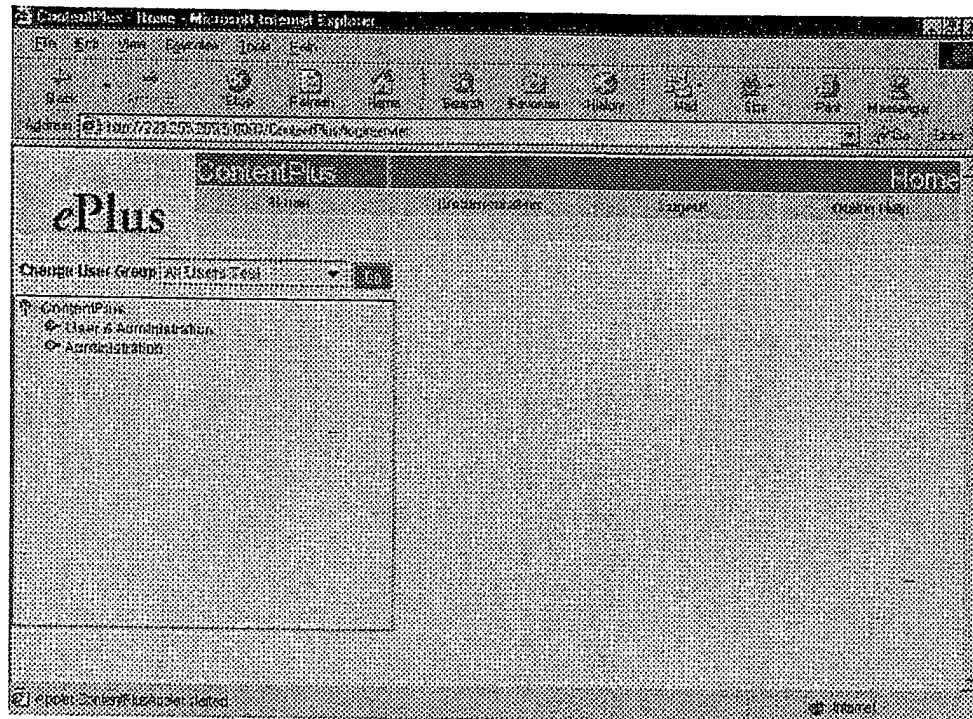
2.1.1 Logging into ContentPlus Site

1. Launch your browser software, and type the URL of your organization's ContentPlus site. The ContentPlus login page for your organizations' site appears.



2. From the ContentPlus login page, in the **User ID** field, enter your ContentPlus site user id.
3. Similarly, in the **Password** field, enter your site password. The password will be encrypted and therefore it will show as asterisk '*'.

4. Click on the **Login** button. The ContentPlus home page, which is the central screen of ContentPlus appears.



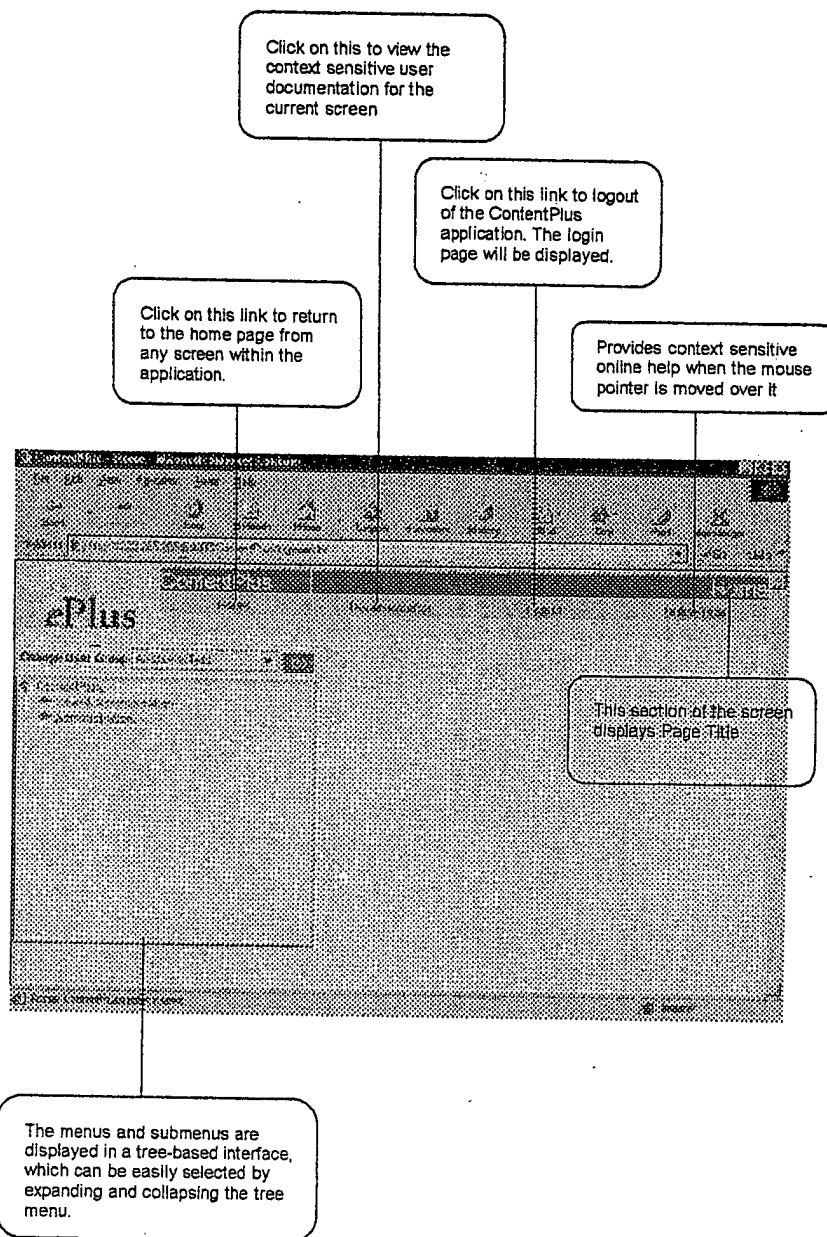
2.1.2 The ContentPlus Home Page

Logging into the ContentPlus site displays the ContentPlus home page. The home page provides access to a range of functions available in the application.

Note: The navigation button viz. Back, Forward, Refresh, Home etc. present on the browser's toolbar must not be used for navigation. Always ensure that the navigation buttons provided on the application interface are used to navigate within the application.

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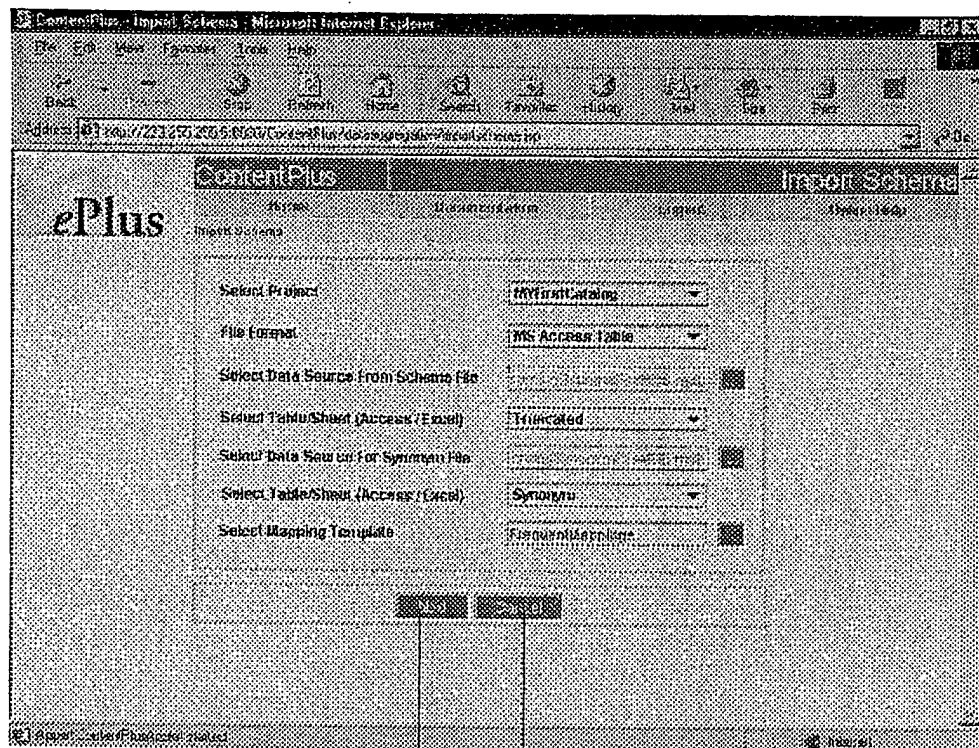


3 Importing External Schema

Incoming schema definitions received in electronic format are imported and appended to the existing schema definition.

3.1 Import Schema

1. Select User & Administration → Data Aggregation → Import Schema in the tree menu on the home page. The Import Schema screen will be displayed as follows:



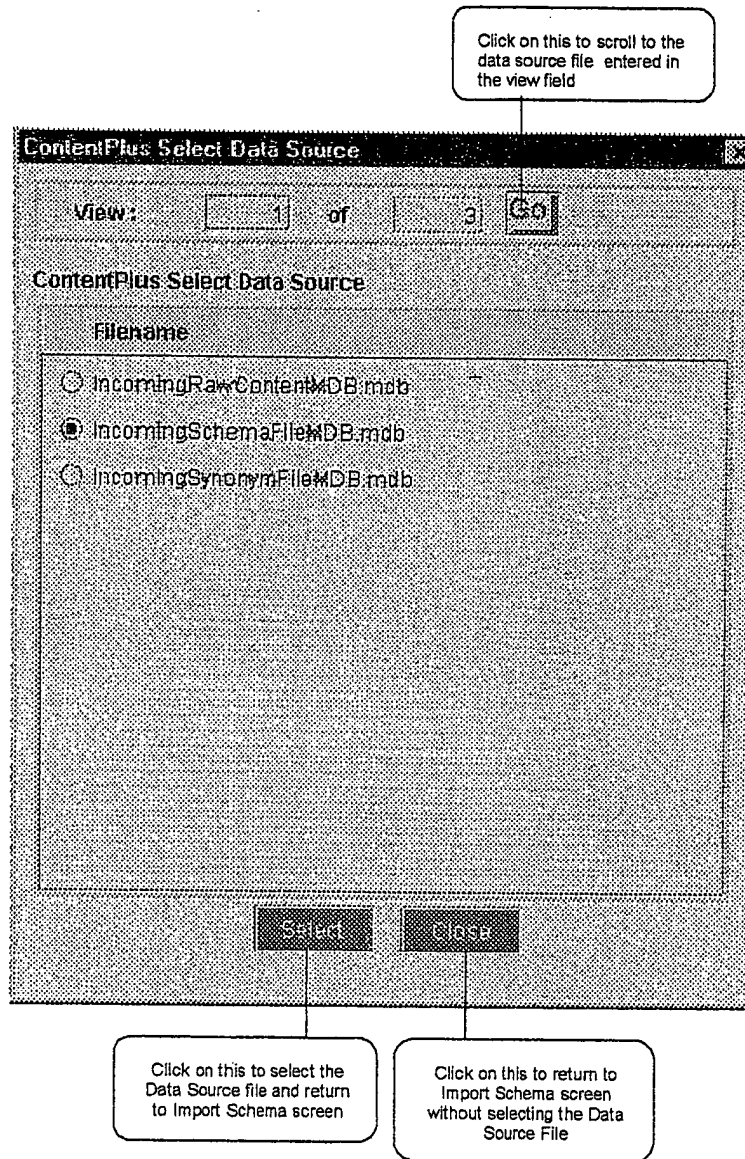
Click on this to proceed to Map Incoming Schema screen (if mapping template is selected). If the mapping template is not selected, Append Incoming Schema screen will appear

Click on this to return to the Home Page

1. From the **Select Project** drop-down list, select the Project into which the schema is to be imported.
2. From the **File Format** drop-down list, select the file format. You may select from any one of the four file formats viz. MS Access (.MDB), MS Excel (.XLS), Comma Separated (.CSV), and XML (.XML).

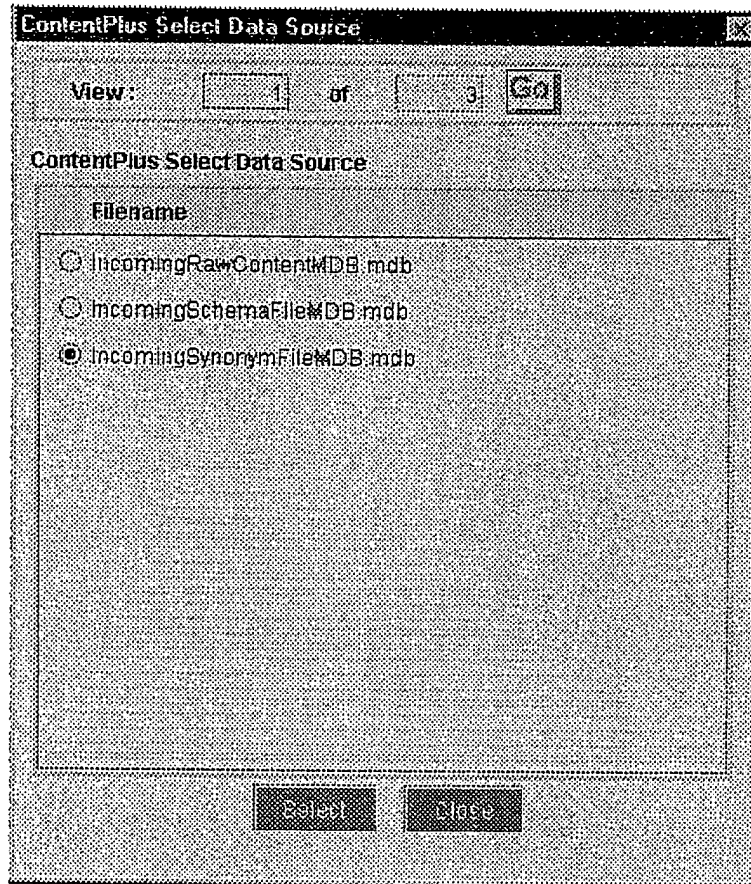
- Click on **Select Data Source From Schema File** button, the Select Data Source dialog box will appear. The dialog box will show a list of files for the selected file format. Select the data source file containing the schema to be imported.

Note: The data source files must be placed under a pre-defined folder on the web server prior to importing.



- After selecting the schema file, click on the **Select** button, you will return to the Import Schema screen.

5. Click on the **Close** button, will return to the Import Schema screen without selecting the Data Source file.
6. From the **Select Table /Sheet (Access / Excel)** drop-down list, select the appropriate database table or excel sheet containing the schema.
7. Click on the **Select Data Source For Synonyms File** button, the Select Data Source dialog box will appear. Select the data source file containing the synonyms to be imported



8. After selecting the synonym file, click on the **Select** button, you will return to the Import Schema screen.
9. Click on the **Close** button, will return to the Import Schema screen without selecting synonym file.
10. In the **Select Table/Sheet (Access / Excel)** field, select the database table or excel sheet containing the synonyms.
11. Click on the **Select Mapping Template** button, the Select Schema Mapping Template dialog box will appear.

12. In the **Select Mapping Template** field select the template. All the fields, which were mapped in the mapped template, will appear as given below.

ContentPlus Select Schema Mapping Template

Select Mapping Template: **AnkiTest1**

External Schema File	ContentPlus Schema File	Type
Field	Field	
attrLabel1		varchar
attrLabel2		varchar
attrLabel3		varchar
attrValue1		varchar
attrValue2		varchar
attrValue3		varchar
ClassName		varchar
ID		integer
ParentID		integer

Set As Default For Project: ☒

Select **Close**

Click on this to select the Mapping Template and return to Import Schema screen

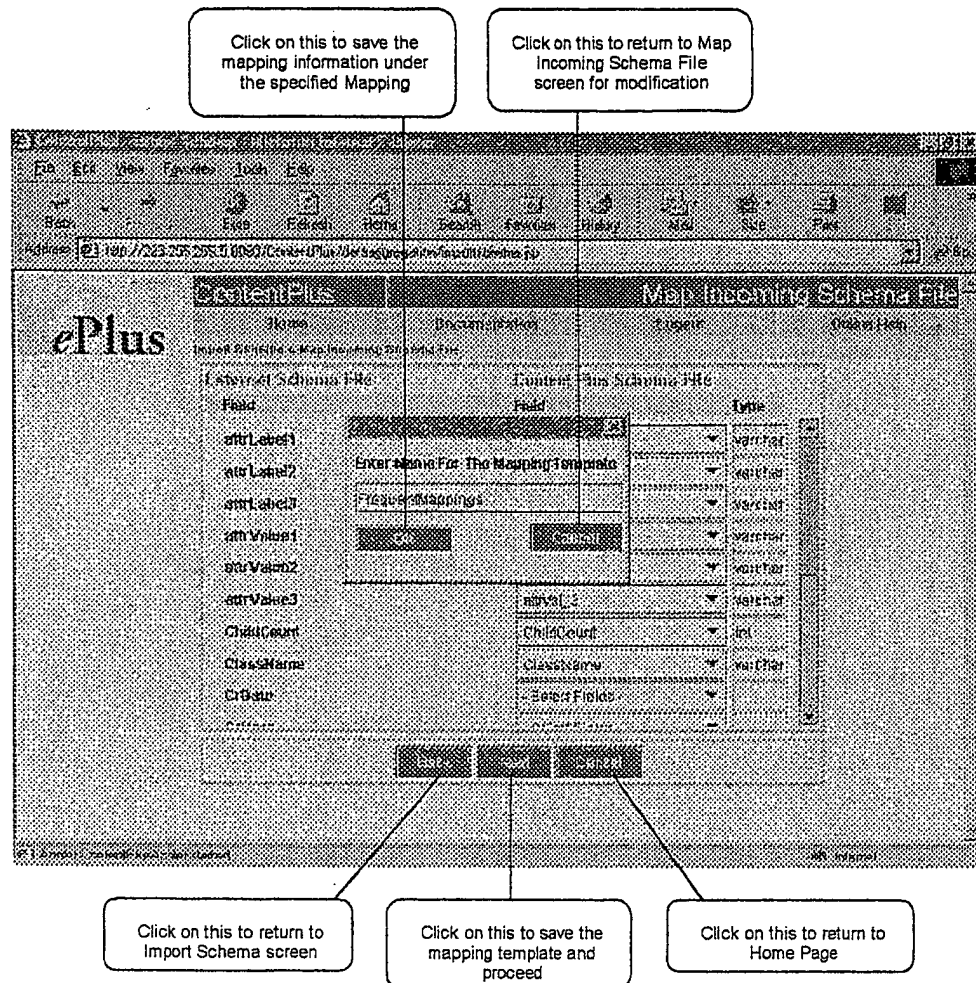
Click on this to return to Import Schema screen without selecting a mapping template

13. Click on check box **Set As Default For Project** field. When this field is checked, the selected mapping template will become the default mapping template for the current project during Import Schema. Click on the **Select** button, to select the mapping template for importing the schema.
14. Click on **Close** button, will return to the Import Schema screen without selecting an existing mapping template.
15. Click on the **Next** button. If a mapping template is not selected, then Map Incoming Schema screen will appear, else the Append Incoming Schema screen will be displayed.

3.2 Map Incoming Schema

1. Map the required external schema file fields with the appropriate ContentPlus Schema file fields, by selecting them from the drop-down list. Class ID, Class Name and Parent ID are mandatory mapping fields.

- Click on the **Next** button, the **Enter Name For The Mapping Template** dialog box will appear.

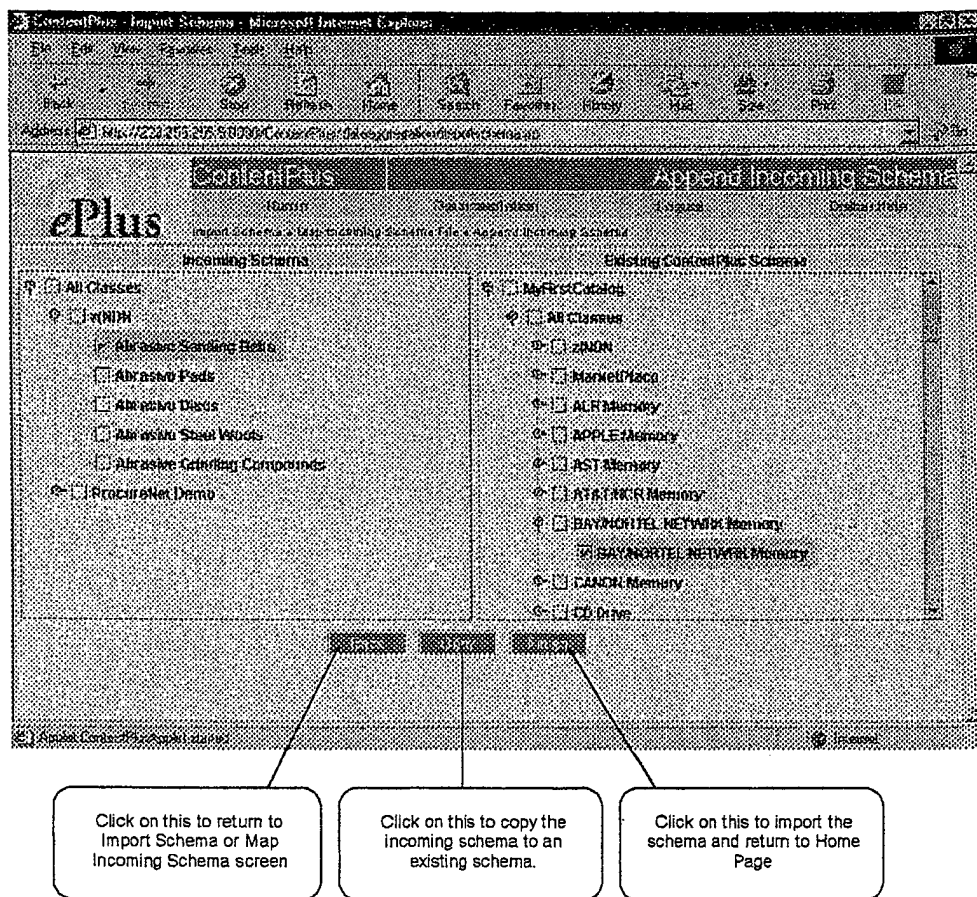


- In the **Enter Name of Mapping Template** field, enter a name for the mapping template. Click on the **OK** button, the Append Incoming Schema screen will appear.
- Click on the **Cancel** button, the dialog box will be cleared and you change the mappings if required.

3.3

Append Incoming Schema

- The incoming schema and the content plus schema will be displayed in a tree-like interface. You can expand these trees to display the schema classes.



2. In the **Incoming Schema** section, select a schema class to be appended to the existing ContentPlus Schema.
3. In the **Existing ContentPlus Schema** section, select a schema class to which the incoming schema is to be appended.
4. Click on the **Copy** button. The message *"Successfully transferred Selected Class"* will appear. Click on **OK** button to clear the message. The Selected Incoming Schema Class will be appended to the Existing ContentPlus Schema.
5. Alternatively, you can drag-and-drop an incoming schema class onto the existing ContentPlus schema class to which it must be appended. The message *"Object dragged from a valid node in incoming schema tree to a valid node in ContentPlus Tree"* will appear. Click on **OK** button to clear the message. Again the message *"Successfully transferred Selected Class"* will appear. Click on **OK** button to clear the message. The dragged incoming schema class will be appended to the existing ContentPlus schema.

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6. Click on the **Finish** button, a message "*Finished Import Schema process*" will be displayed. This will import the incoming schema and you will return to the home page.
7. Click on the **Back** button, you will return to the Import Schema screen.

APPENDIX VI – SCHEMA MANAGEMENT

ContentPlus – Schema Management User's Guide

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2.1	Logging into ContentPlus	5
3	Schema Management (CLG)	8
3.1	Add New Project	8
3.2	Add New Class	9
3.3	Delete Class	22
4	Schema Maintenance	24
4.1	Add New Class	24
4.2	Delete Class	32

1 Introduction

1.1 Welcome to ContentPlus

ContentPlus, is a robust, easy-to-use rich content creation and management application that provides users with the ability to:

- ❑ Create a standard rich content database with referencing schema of classification.
- ❑ Maintain classification schema and items by addition, modification or deletion.
- ❑ Import classification schema and rich content data from different sources.
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- ❑ Internet Explorer v. 5.5 or higher
- OR-
- Netscape Navigator v. 6.0 or higher

Hardware Requirements

- ❑ 800 x 600 pixels screen resolution

1.3 Contacting ePlus Content Services, Inc.

Refer to the following sections for information about contacting ePlus, inc. for customer support or sales information.

1.3.1 ePlus, Inc. Headquarters

ePlus, inc. is a leading provider of supply chain management solutions. From integrated financial services, to an end-to-end, web-based procurement application, to a comprehensive, web-based asset management application, to

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unparalleled client services, ePlus, inc. provides its rapidly growing customer base complete supply chain management solutions.

Corporate Headquarters

Address

ePlus, inc.
400 Herndon Parkway
Herndon, VA 20170

Telephone

1-703-264-0770

-or-

1-800-827-5711

Office Hours

Monday to Friday

9:00 A.M. to 5:30 P.M. Eastern Standard Time

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2 Getting Started

2.1 Logging into ContentPlus

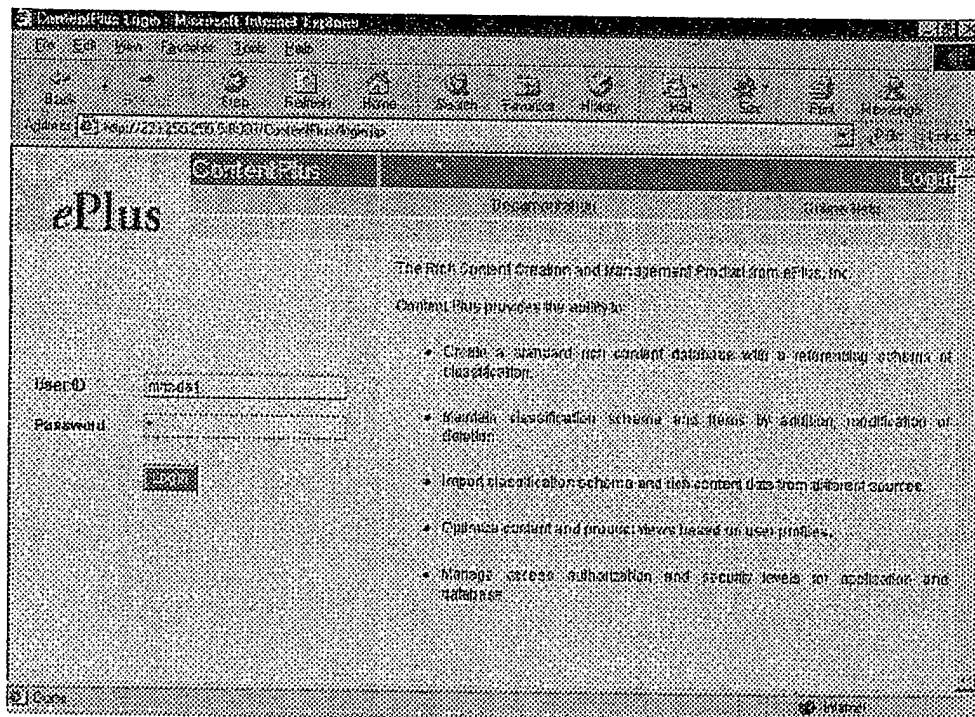
Your ContentPlus System Administrator provides you the Uniform Resource Locator (URL) of your organization's ContentPlus site along with your ContentPlus login name and password.

Your login information is used to verify your access permissions and to control the functions you can see and perform in ContentPlus.

Logging into ContentPlus is easy. After you access the ContentPlus Login page, simply enter your login name and password.

2.1.1 Logging into ContentPlus Site

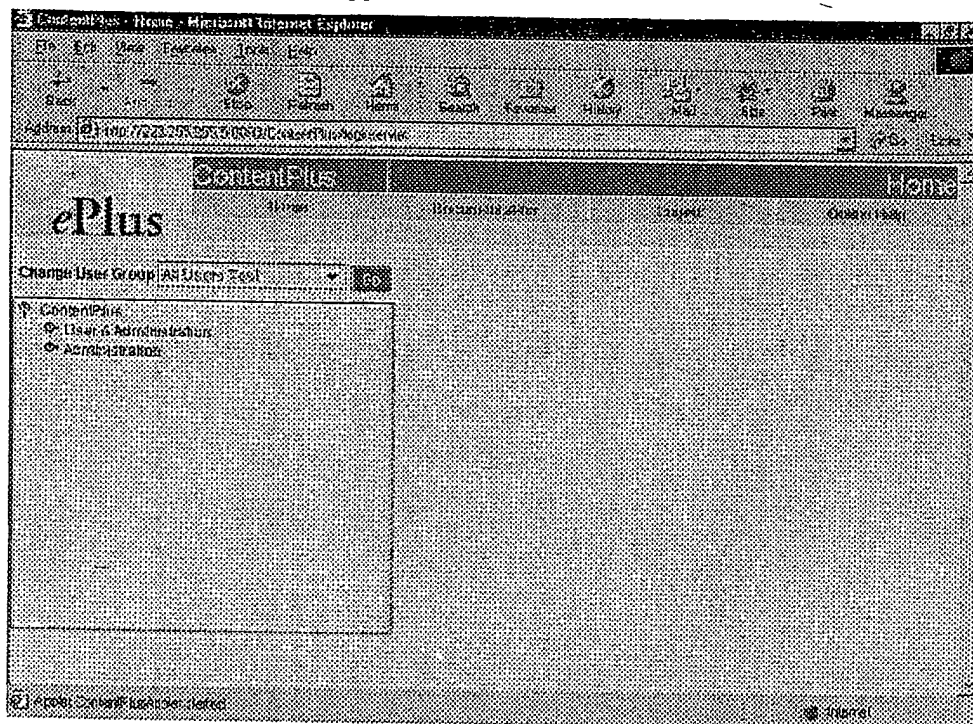
1. Launch your browser software, and type the URL of your organization's ContentPlus site. The ContentPlus login page for your organizations' site appears.



2. From the ContentPlus login page, in the **User ID** field, enter your ContentPlus site user id.
3. Similarly, in the **Password** field, enter your site password. The password will be encrypted and therefore it will show as asterisk '*'.

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4. Click on the **Login** button. The ContentPlus home page, which is the central screen of ContentPlus appears.



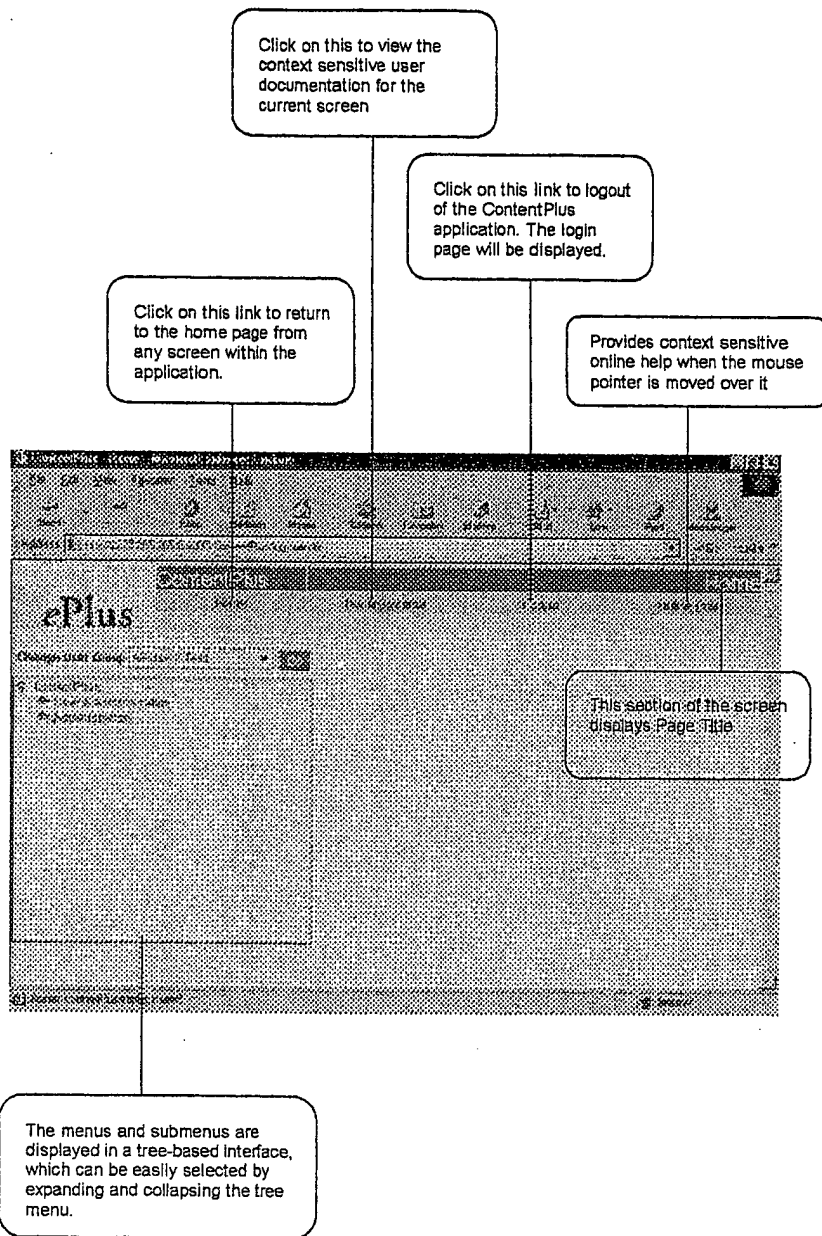
2.1.2 The ContentPlus Home Page

Logging into the ContentPlus site displays the ContentPlus home page. The home page provides access to a range of functions available in the application.

Note: The navigation button viz. Back, Forward, Refresh, Home etc. present on the browser's toolbar must not be used for navigation. Always ensure that the navigation buttons provided on the application interface are used to navigate within the application.

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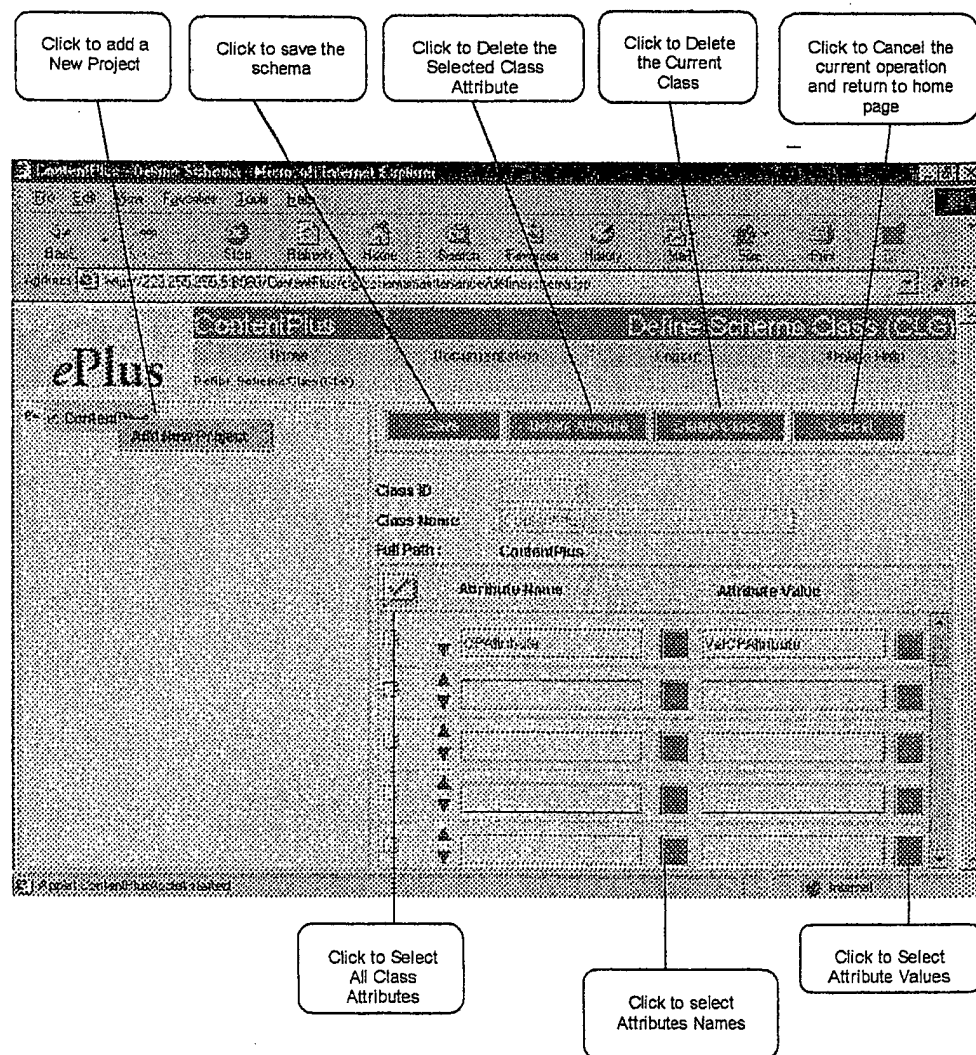


3 Schema Management (CLG)

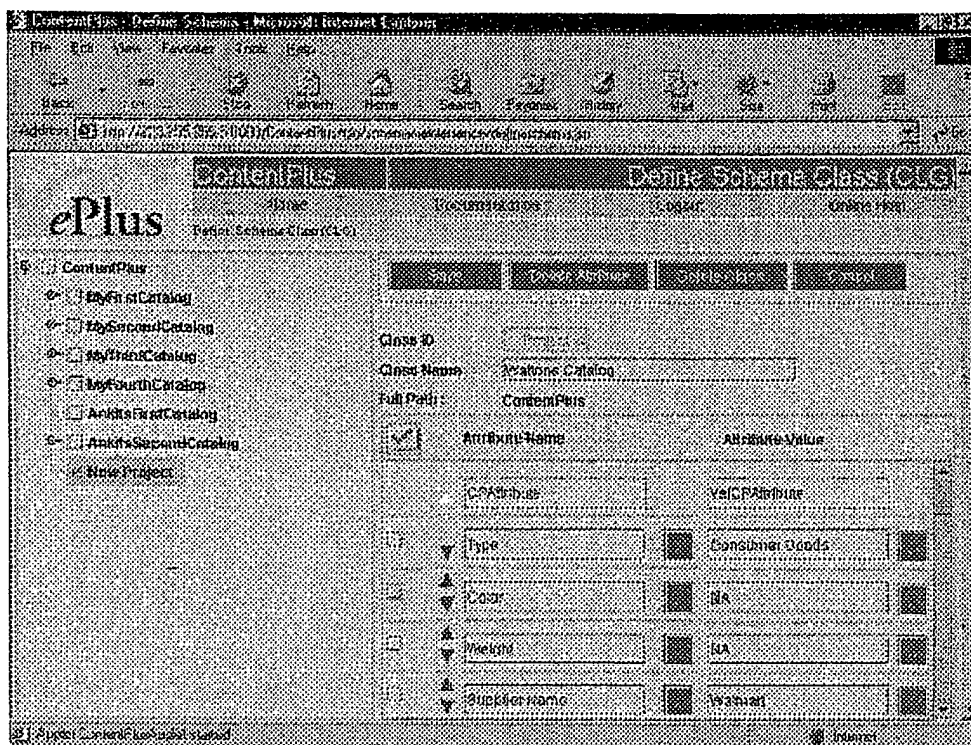
For managing content in a collaborative, multi-user, multi-catalog environment, a "project" is defined per catalog. Upon creating a "project", the classification schema for the project can be defined as classes and sub-classes under it. Each class is defined in terms of attributes. A class inherits attributes from its parent. The following section describes the set of GUI Screens used to perform schema definition and maintenance functions.

3.1 Add New Project

1. Select User & Administration → CLG Processing → Schema Management → Define Schema in the tree menu on the home page. The Define Schema screen will be displayed as follows:



2. Select the root node in the left pane, right click and select **Add New Project** from the popup menu.



3. In the **Class Name** field in the right pane, enter the name of the project.
 4. In the **Attribute Name** field, enter the attribute name. Alternatively, click on the **Select Attribute (...)** button, the Select Attribute dialog box will appear. Select from the list of available attributes.
 5. In the **Attribute Value** field, enter the attribute value.
- Note:** The Select Attribute Value (...) dialog box can be opened only for the saved class attributes.
6. Click on the **Save** button. The message "New Project has been successfully created" will appear. Click on **OK** button to clear the message.

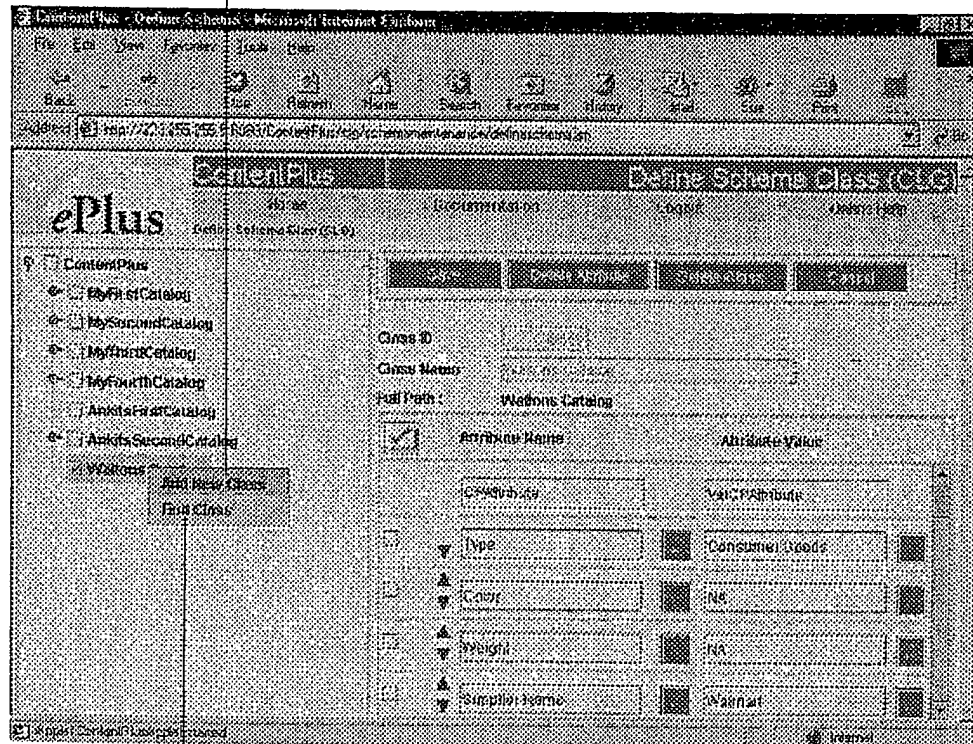
3.2 Add New Class

1. Select a project or a class from the left pane, and right click on the selected node.

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Click to add a new Class



Click to find the class in the selected project

2. Select **Add New Class** option from the right-click menu.

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ContentPlus - Define Schema - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Address <http://223.27.255.5:8041/ContentPlus/defineSchemaClass.jsp>

ContentPlus Define Schema Class (CLC)

Home Create/Edit Class Login Logout Help

Define Schema Class (CLC)

ContentPlus

- HyFirstCatalog
- HySecondCatalog
- HyThirdCatalog
- HyFourthCatalog
- AeNetsFirstCatalog
- AeNetsSecondCatalog
- HyFifthCatalog
- Tablet Powders

Class ID: 1005

Class Name: Watson Catalog Tablet Powders

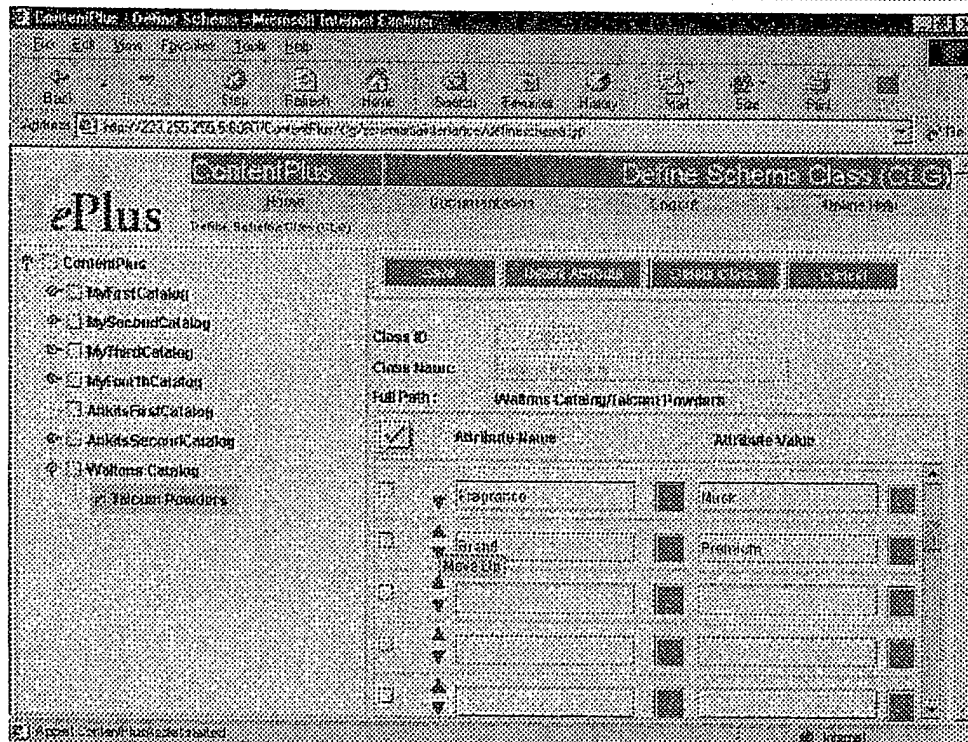
Full Path: Watson Catalog Tablet Powders

Attribute Name	Attribute Value
Color	NA
Weight	NA
Supplier Name	Watson
Brand	Prestige
Fragrance	Musk

Save Cancel

3. In **Class Name** field, enter the class name.
4. In the **Attribute Name** field, enter the attribute name.
5. In the **Attribute Value** field, enter the attribute value.
6. Click on the **Save** button. The message *"New Class <classname> has been successfully created"* will appear. Click on **OK** button to clear the message.

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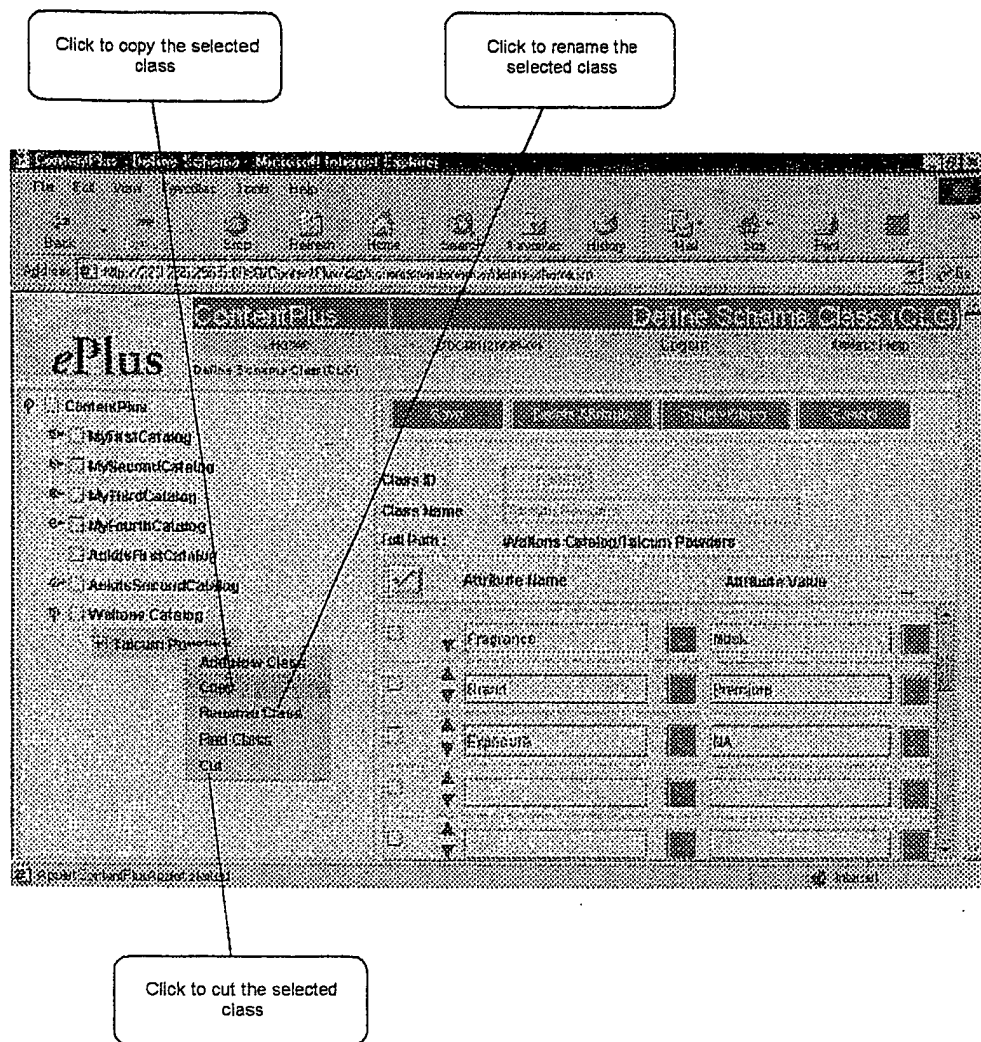
- [illegible]

9. Click on the **Attribute Name** link to select an attribute and close the dialog box.
10. Click on the **Save** button. The message *"Details of selected class have been successfully updated"* will appear. Click on **OK** button to clear the message.
11. In case, a copy of an existing class is to be created, then right-click on the appropriate class and select **Copy** from the right-click menu. Right-click on the target class, and select **Paste** from the right-click menu. A message *"Do you want to copy the items under the selected class and all its subclasses"* will appear. Click on **Yes** button to copy. The selected class will be copied under the target class.

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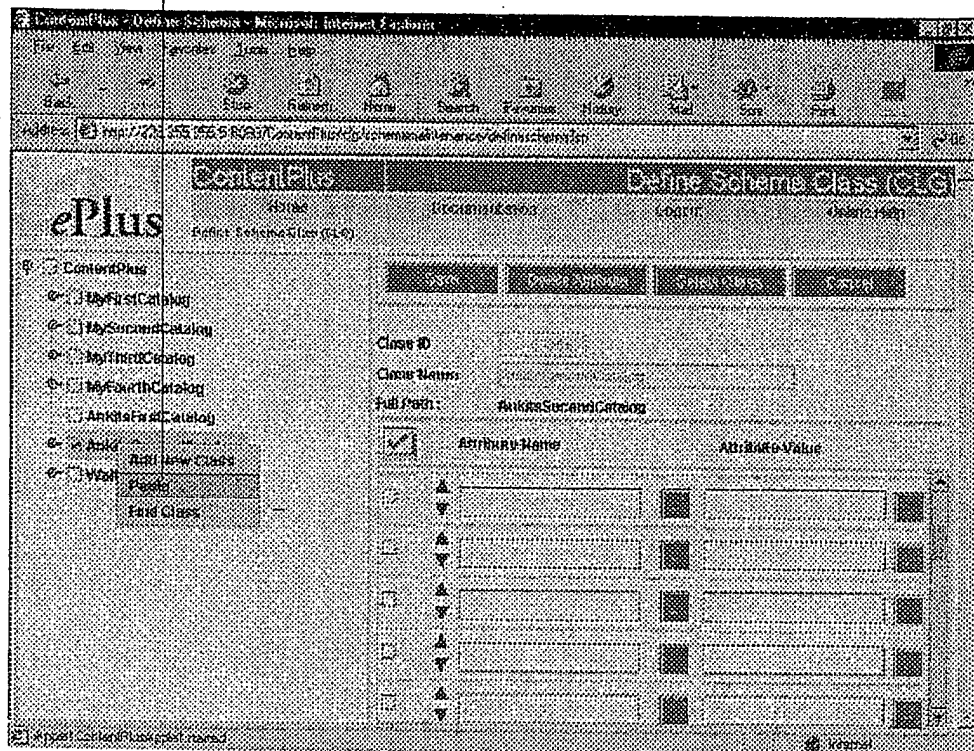
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Click to Paste the
Copy/Cut Class

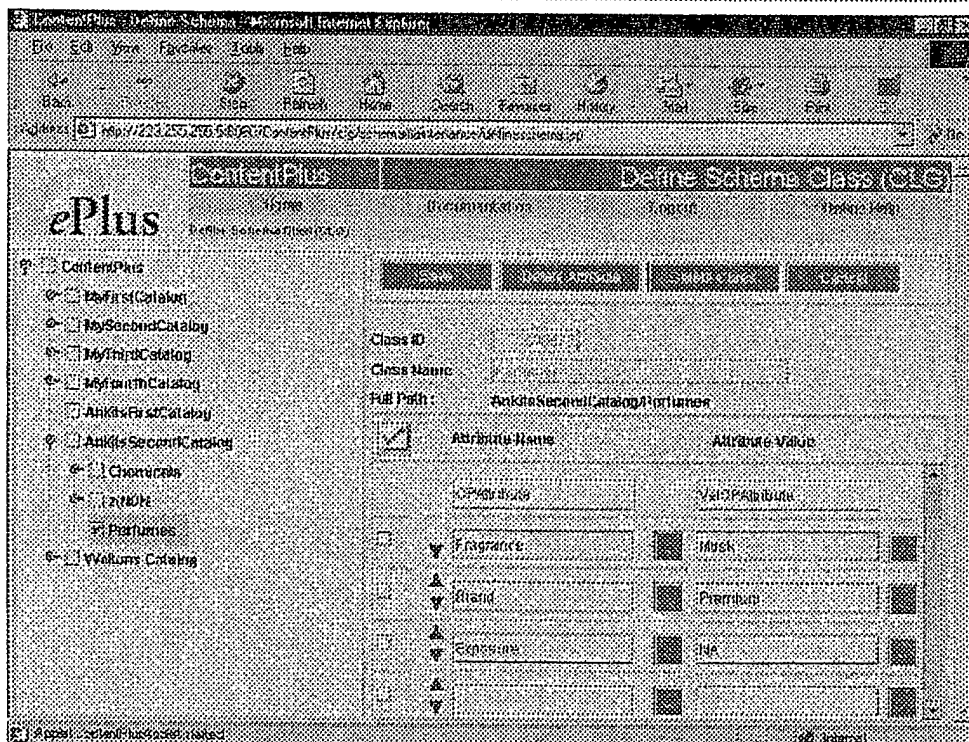
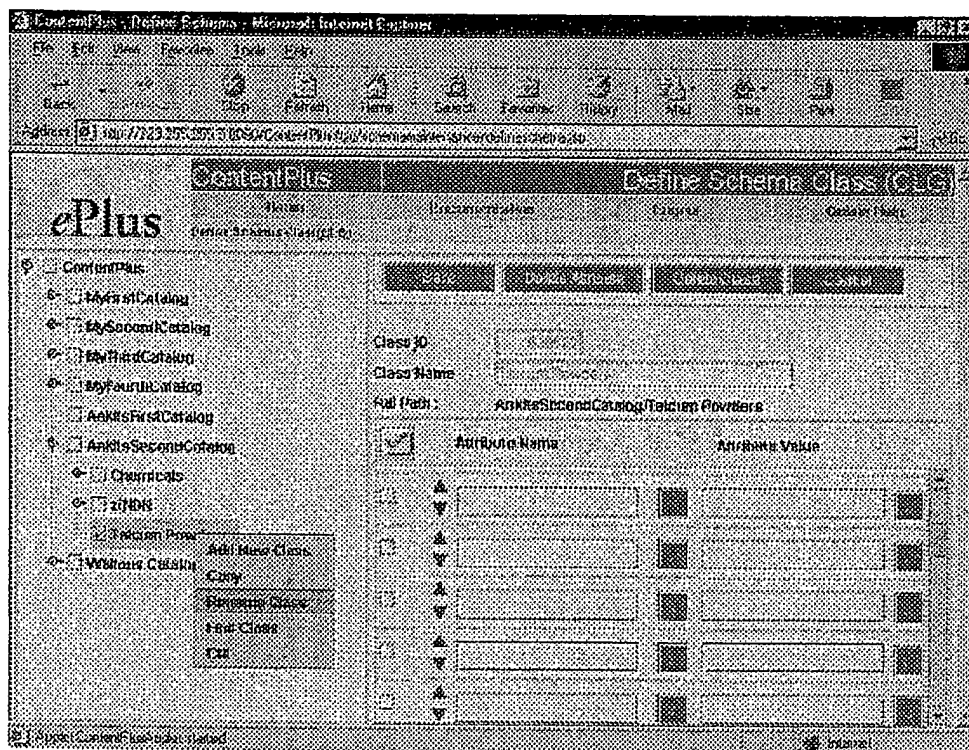


12. In case, a class is to be renamed right-click on the respective class and select **Rename Class** option from the right-click menu.

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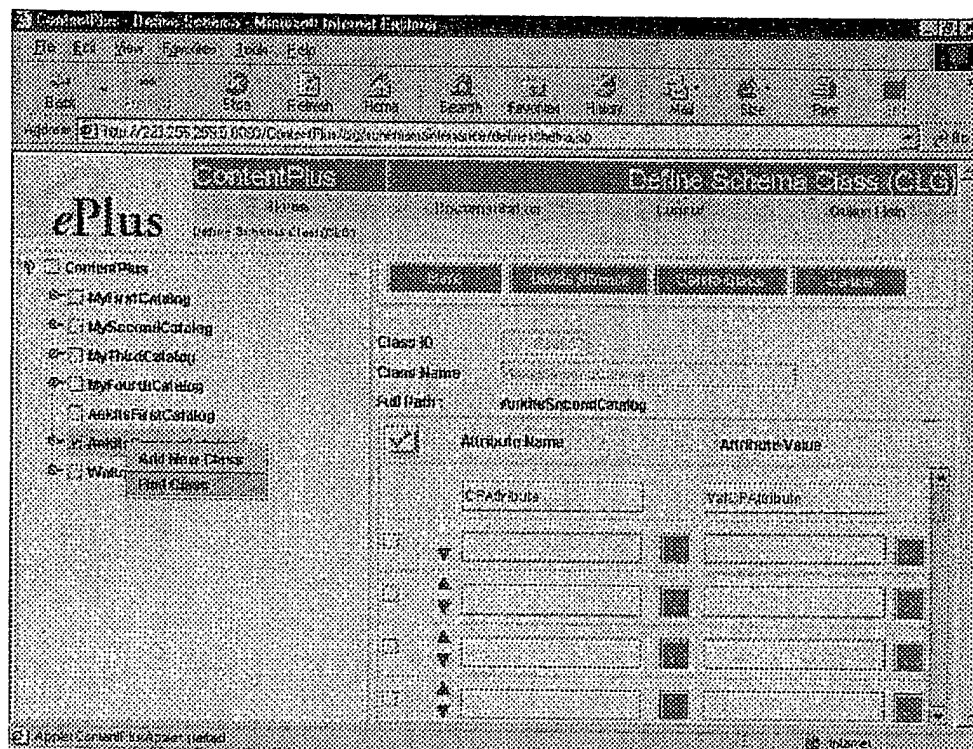
13. In the **Class Name** field, modify the class name.

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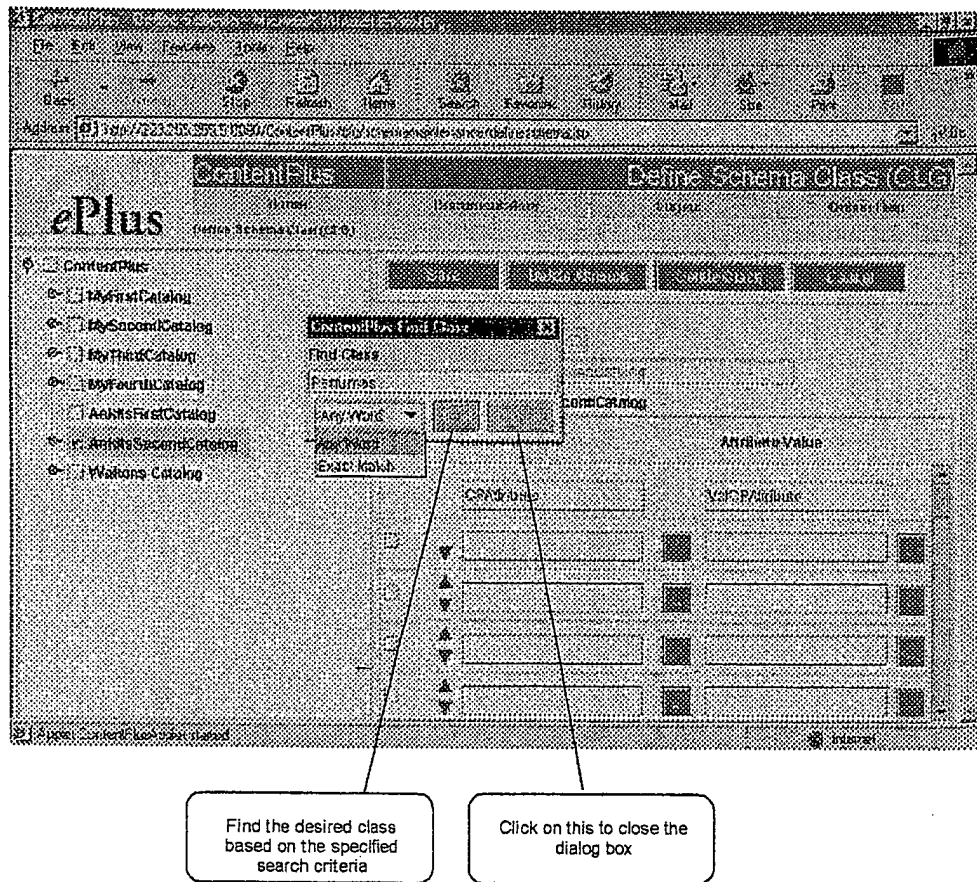
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14. Click on the **Save** button. The message "Selected class has been successfully renamed" will appear. Click on **OK** button to clear the message.
15. In case, a particular class is to be searched, then right-click on the tree and select **Find Class** option from the right-click menu. The Find Class dialog box will appear.



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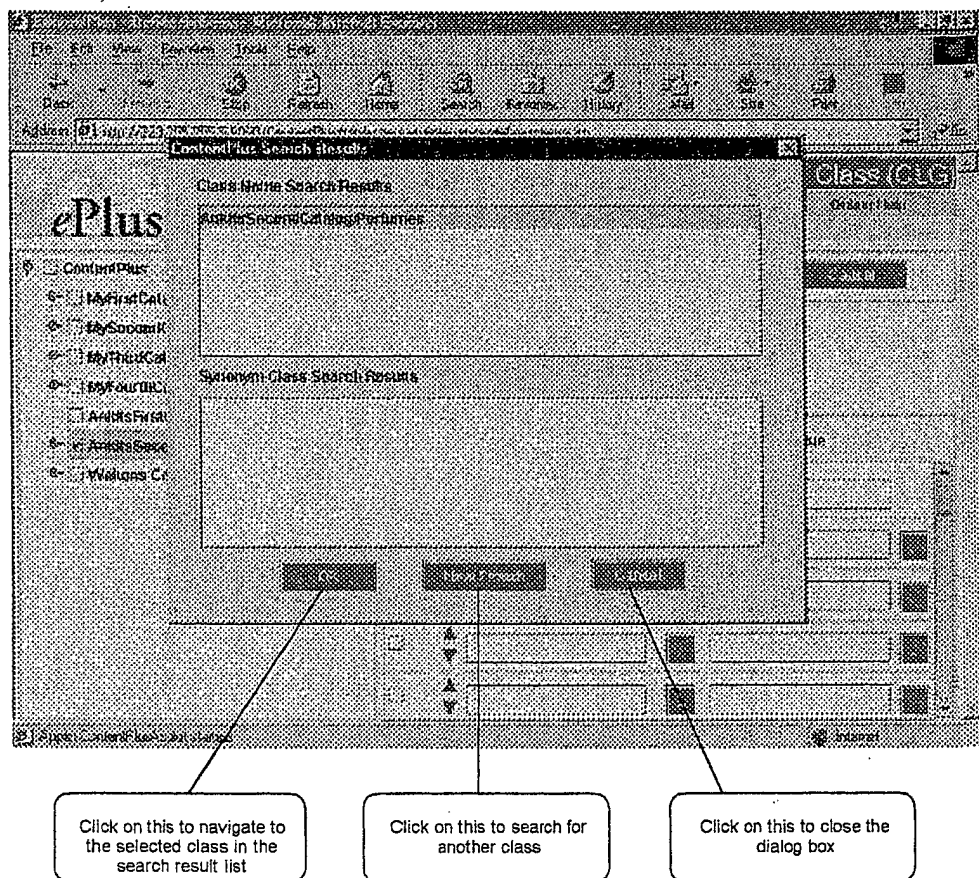


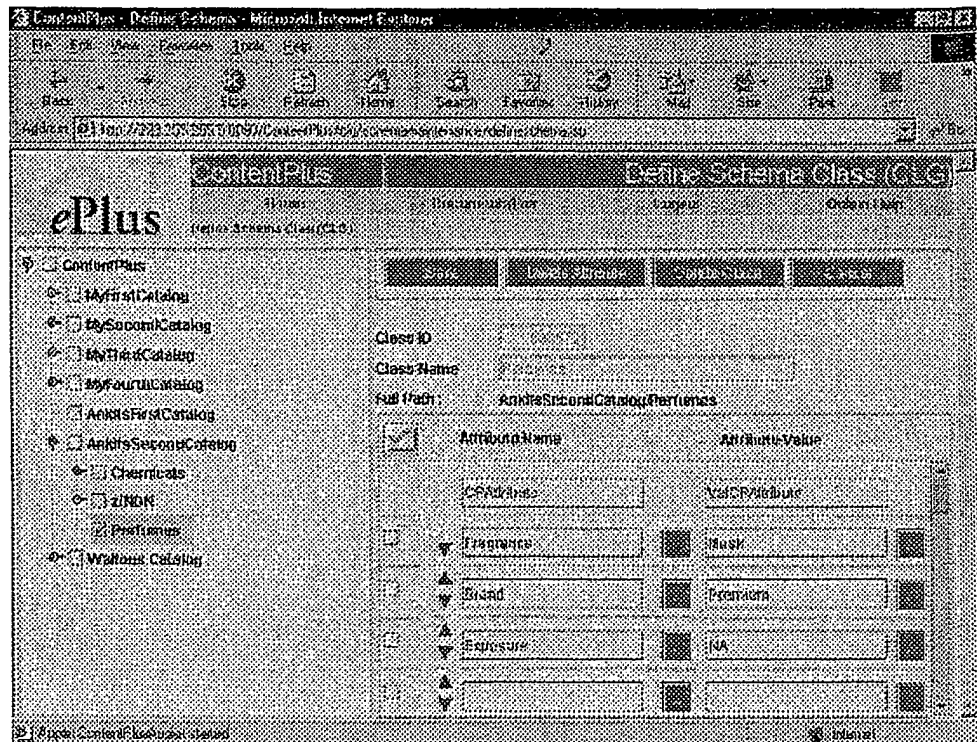
16. In the **Find Class** field, enter the class name for search. From the drop-down list select either **Any Word** or **Exact Match** option depending on the method for searching.
17. Click on **Find** button, the Class Name Search Results dialog box will appear. The dialog box will show the full class path under which the searched class was found.

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18. Select the required class path, and click on the **OK** button, to expand the tree select the respective class. Click on the **New Search** button in case you want repeat the search, or click on the **Cancel** button to clear the dialog box and return to Define Schema Class (CLG) screen.
19. In case, you want to move an existing class right-click on the respective class and select **Cut** option from the right-click menu.

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ContentPlus - Define Schema - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Address: http://223.252.255.56/ContentPlus/SchemaManager/defineSchema.asp

ContentPlus Define Schema Class (CLC)

Home Define Schema Class (CLC) Define Schema Class (CLC) Define Schema Class (CLC)

ContentPlus

MyFirstCatalog
MySecondCatalog
MyThirdCatalog
MyFourthCatalog
AnkleFirstCatalog
AnkleSecondCatalog
Chemicals
ZINC
Perfumes
Waxes

Add New Class
Copy
Rename Class
Find Class
Cut

Class ID: 1234567890
Class Name: AnkleSecondCatalogPerfumes
Full Path: AnkleSecondCatalogPerfumes

Attribute Name	Attribute Value
CPAID	Val:CPAID
Fragrance	Mask
Brand	Pradium
Exposure	NA

Applet ContentPlus.jar loaded

ContentPlus - Define Schema - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Address: http://223.252.255.56/ContentPlus/SchemaManager/defineSchema.asp

ContentPlus Define Schema Class (CLC)

Home Define Schema Class (CLC) Define Schema Class (CLC) Define Schema Class (CLC)

ContentPlus

MyFirstCatalog
MySecondCatalog
MyThirdCatalog
MyFourthCatalog
AnkleFirstCatalog
AnkleSecondCatalog
Chemicals
ZINC
Perfumes
Waxes

Add New Class
Copy
Rename Class
Find Class
Cut

Class ID: 1234567890
Class Name: Waxes Catalog
Full Path: Waxes Catalog

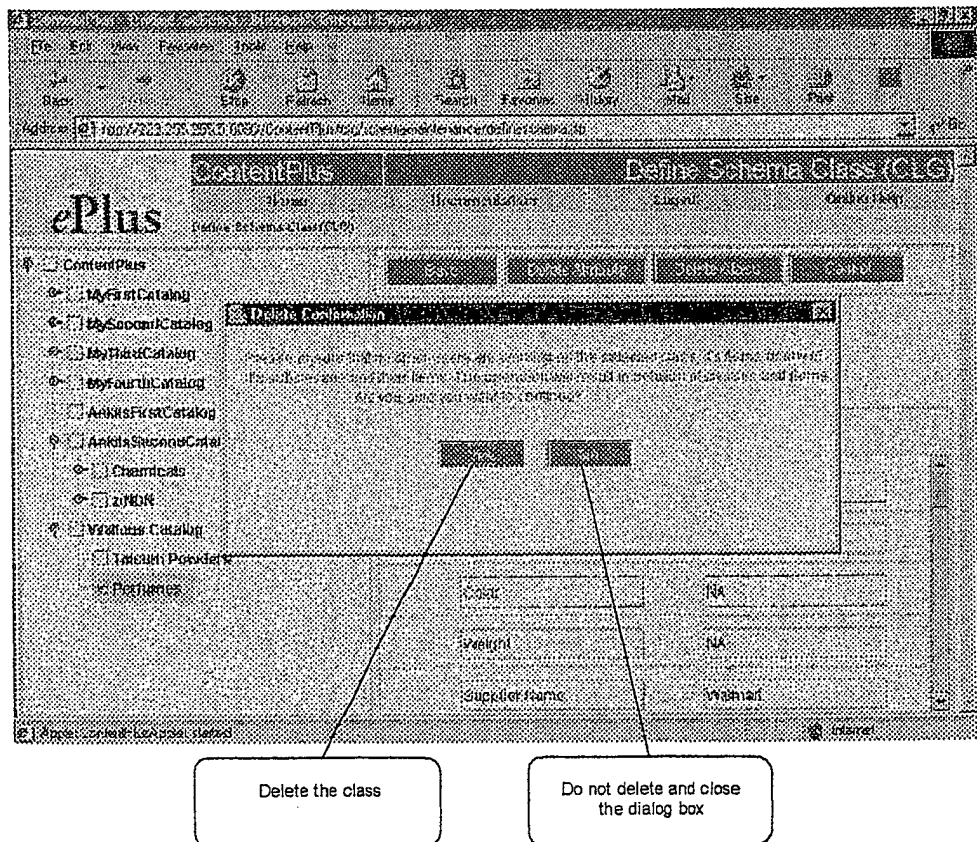
Attribute Name	Attribute Value
CPAID	Val:CPAID
Type	Consumer Goods
Color	NA
Weight	NA
Supplier Name	Walmart

Applet ContentPlus.jar loaded

20. Right-click on the target class, and select **Paste** option from the right-click menu. The message "Item under the selected class and all it's subclasses will be copied" will appear. Click on **OK** button to clear the message. The selected class will be moved under the target class.

3.3 Delete Class

1. Select the class to be deleted, and click on the **Delete Class** button. The message "Please ensure that no other users are working on the selected class, its items or any of its subclasses and their items. The operation will result in deletion of classes and items. Are you sure you want to continue." will appear.

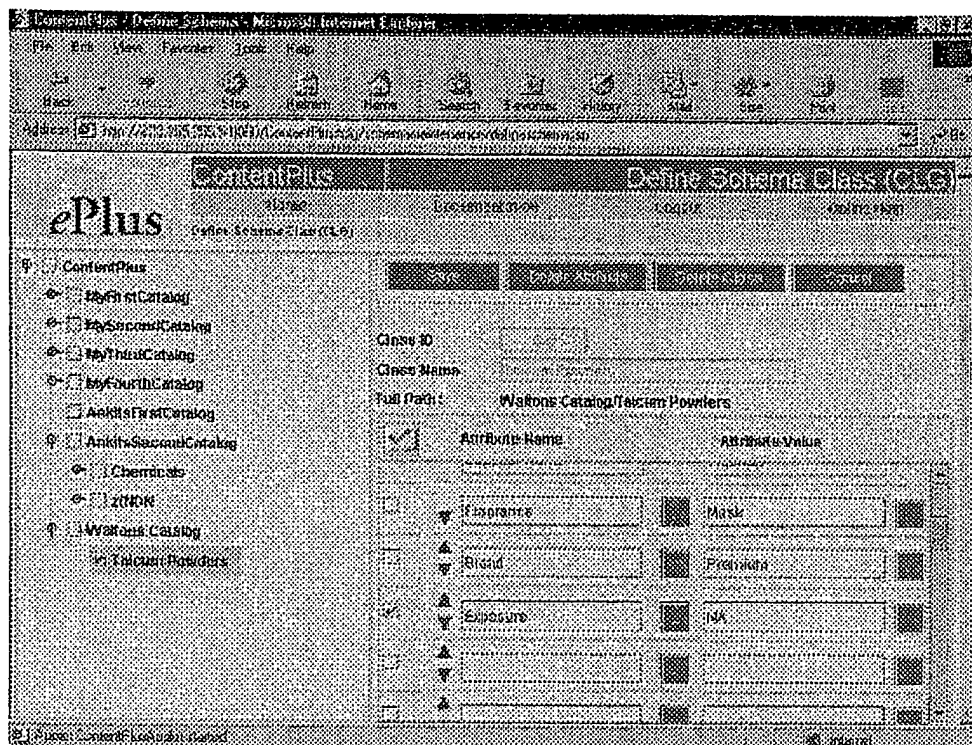


2. Click on **Yes** button to delete the class. The message "The selected class has been successfully deleted" will appear. Click on **OK** button to clear the message. Click on **No** to cancel the delete operation.
1. In case, the class's attributes need to be deleted, select the check box for the respective attribute and click on the **Delete Attribute** button. The message "The selected class attributes have been deleted" will appear. Click on **OK**

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button to clear the message. The selected attributes will be deleted from the respective class.



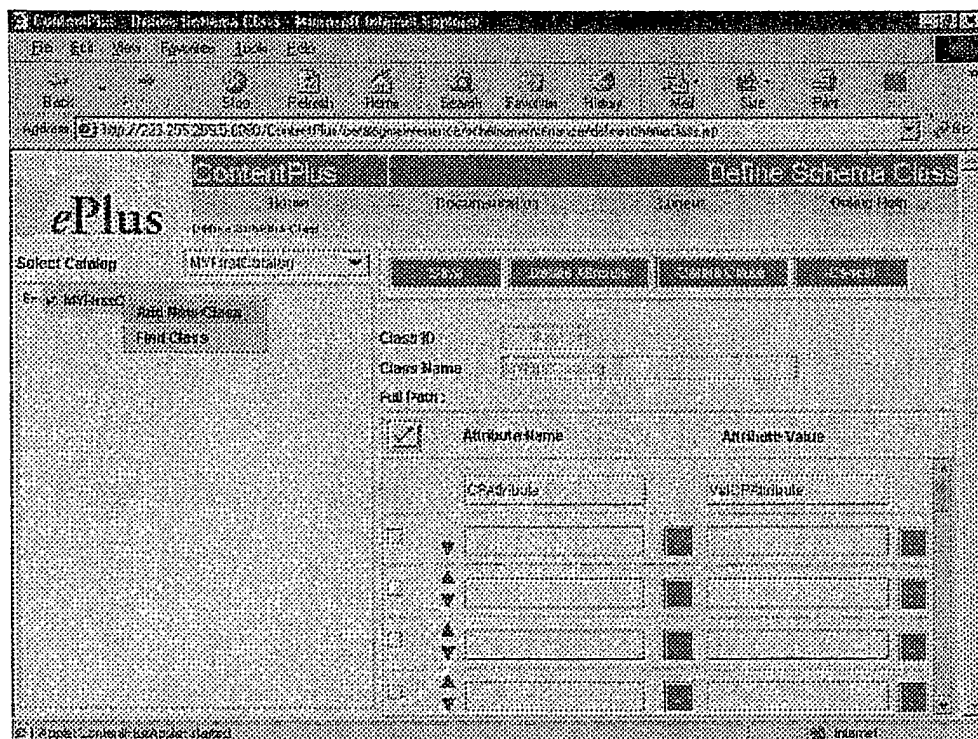
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4 Schema Maintenance

Through the schema maintenance function users can create classes that represent the classification schema for items.

4.1 Add New Class

1. Select User & Administration → Catalog Maintenance → Schema Maintenance → Define Schema in the tree menu on the home page. The Define Schema screen will be displayed as follows:
2. Select a project or a class from the left pane, and right click on the selected node



3. Select **Add New Class** option from the right-click menu.
4. In **Class Name** field, enter the class name.
5. Click on the **Select Attribute** button, the Select Attribute dialog box will appear.

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ContentPlus **Define Schema Class**

Select Catalog: All First Catalog

☐ All First Catalog
☐ All Classes
☐ New Class

Class ID: 10000000000000000000000000000000
Class Name: CheckAbsorbers

Attribute Name: Attribute Value

Attribute Name	Attribute Value
1. Author	Value/Reference
2. Author Note	
3. Author Note	
4. Author Note	
5. Author Note	
6. Author Note	
7. Author	
8. Author	
9. Author	

OK Cancel

- Click on the **Attribute Name** link to select an attribute and close the dialog box.
- Click on the **Save** button. The message "New Class <classname> has been successfully created" will appear. Click on **OK** button to clear the message.
- In case, a copy of an existing class is to be created, then right-click on the appropriate class and select **Copy** from the right-click menu. Right-click on the target class, and select **Paste** from the right-click menu. A message "Do you want to copy the items under the selected class and all its subclasses" will appear. Click on **Yes** button to copy. The selected class will be copied under the target class.

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ContentPlus - Define Schema Class - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Home Search Favorites History Mail File Print

Address http://221.250.210.58/ContentPlus/catalog/elements/defineSchemaClass.jsp

ContentPlus Define Schema Class

Select Catalog: MyFirstCatalog

ePlus Define Schema Class

MyFirstCatalog

☐ All Classes

☒ Shock Absorbers

Add New Class
Copy
Find Class
Cut

Class ID:

Class Name:

Full Path: MyFirstCatalogShock Absorbers

Attribute Name	Attribute Value
CPAAttribute	ValSPAttribute
Shock Absorber	Shock Absorber

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ContentPlus - Define Schema Class - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Home Search Favorites History Mail File Print

Address http://221.250.210.58/ContentPlus/catalog/elements/defineSchemaClass.jsp

ContentPlus Define Schema Class

Select Catalog: MyFirstCatalog

ePlus Define Schema Class

MyFirstCatalog

☐ All Classes

☒ Shock Absorbers

Add New Class
Copy
Find Class
Cut

Class ID:

Class Name:

Full Path: MyFirstCatalogAll Classes

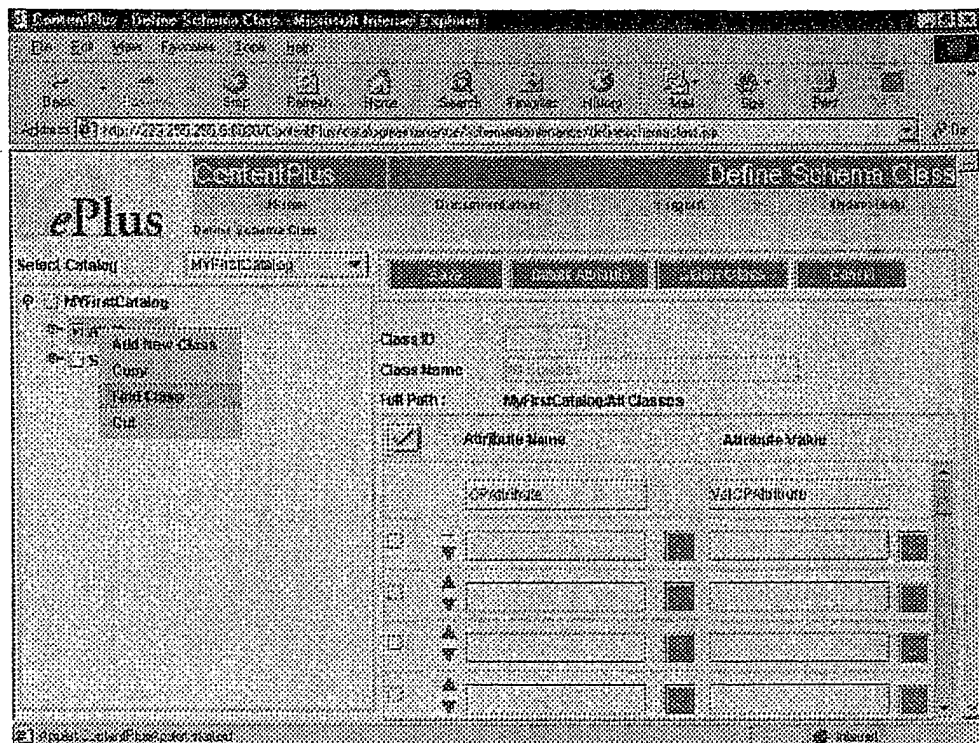
Attribute Name	Attribute Value
CPAAttribute	ValSPAttribute

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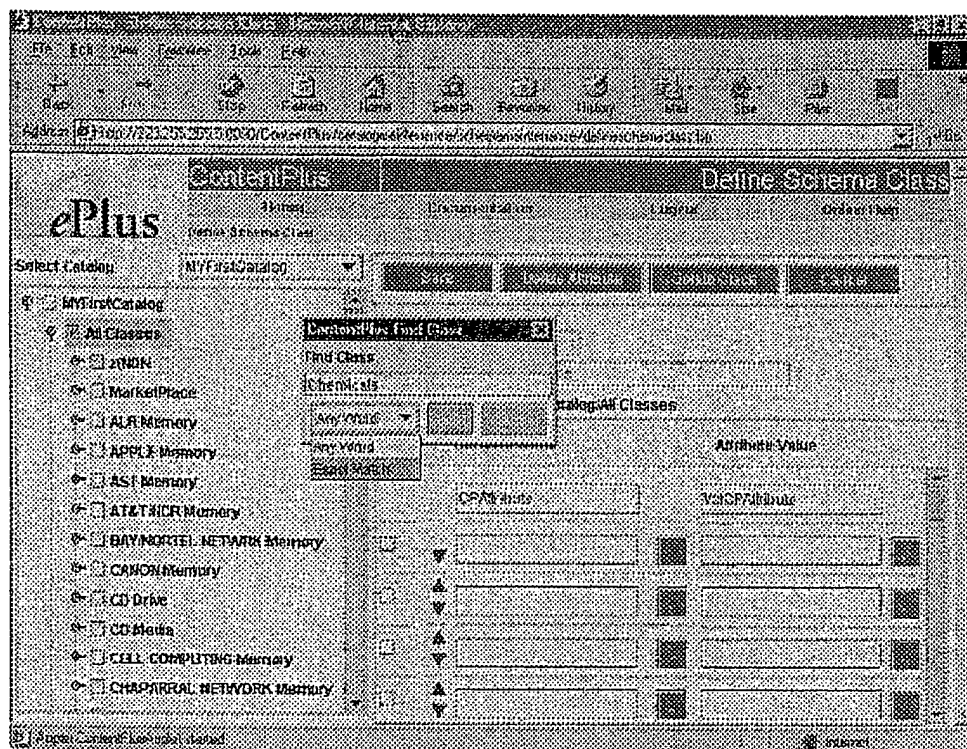
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- In case, a particular class is to be searched, then right-click on the tree and select **Find Class** option from the right-click menu. The Find Class dialog box will appear.



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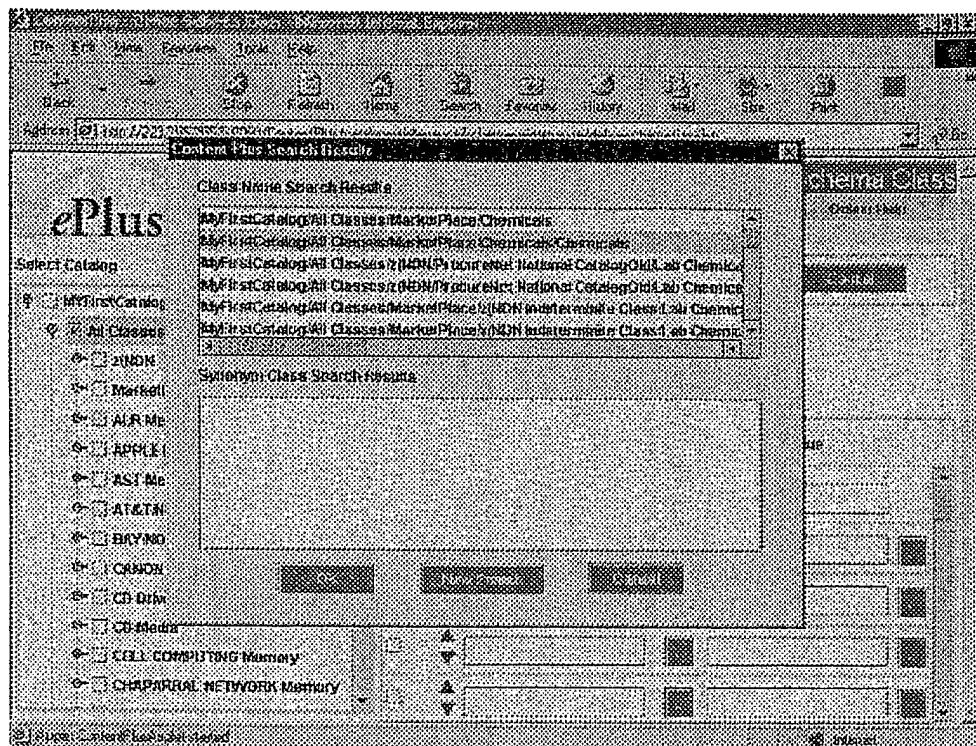
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10. In the **Find Class** field, enter the class name for search. From the drop-down list select either **Any Word** or **Exact Match** option depending on the method for searching.
11. Click on **Find** button, the Class Name Search Results dialog box will appear. The dialog box will show the full class path under which the searched class was found.

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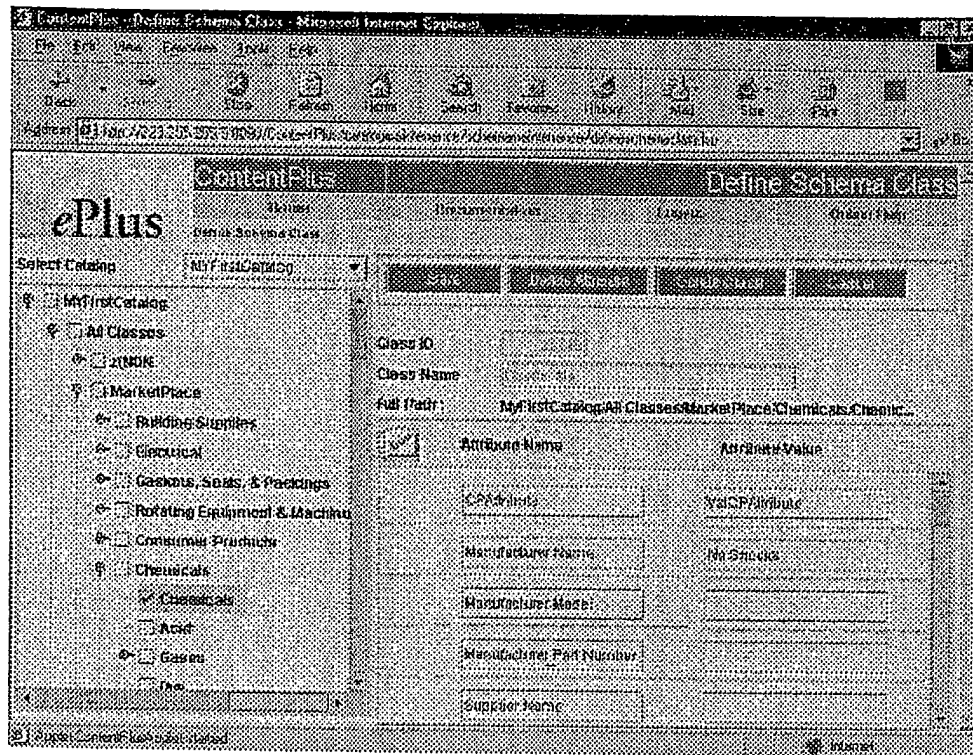
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12. Select the required class path, and click on the **OK** button, to expand the tree and select the respective class. Click on the **New Search** button in case you want repeat the search, or click on the **Cancel** button to clear the dialog box and return to Define Schema Class screen.

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13. In case, you want to move an existing class right-click on the respective class and select **Cut** option from the right-click menu.

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ContentPlus - Define Schema Class - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Address: http://223.257.257.100/ContentPlus/define/schema/class/define/schema/class.htm

ContentPlus Define Schema Class

Select Catalog: MYFirstCatalog

Class ID: 12345

Class Name: MyFirstCatalogAllClassesMarketPlaceChemicals

Full Path: MyFirstCatalogAllClassesMarketPlaceChemicals

Attribute Name	Attribute Value
CPACData	YACPAData
Manufacturer Name	My Stock
Manufacturer Model	
Manufacturer Part Number	
Supplier Name	

MyFirstCatalog

- All Classes
- 2(MM)
- MarketPlace
- Building Supplies
- Electrical
- Gaskets, Seals, & Packings
- Rotating Equipment & Machinery
- Continuous Products
- Chemicals
 - Add New Class
 - Copy
 - Paste
 - Find Class
 - Cut

MyFirstCatalog

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ContentPlus - Define Schema Class - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Address: http://223.257.257.100/ContentPlus/define/schema/class/define/schema/class.htm

ContentPlus Define Schema Class

Select Catalog: MYFirstCatalog

Class ID: 12345

Class Name: MyFirstCatalogShock Absorbers

Full Path: MyFirstCatalogShock Absorbers

Attribute Name	Attribute Value
CPACData	YACPAData
Body Material	Gal. Steel

MyFirstCatalog

- All Classes
- Add New Class
- Copy
- Paste
- Find Class
- Cut

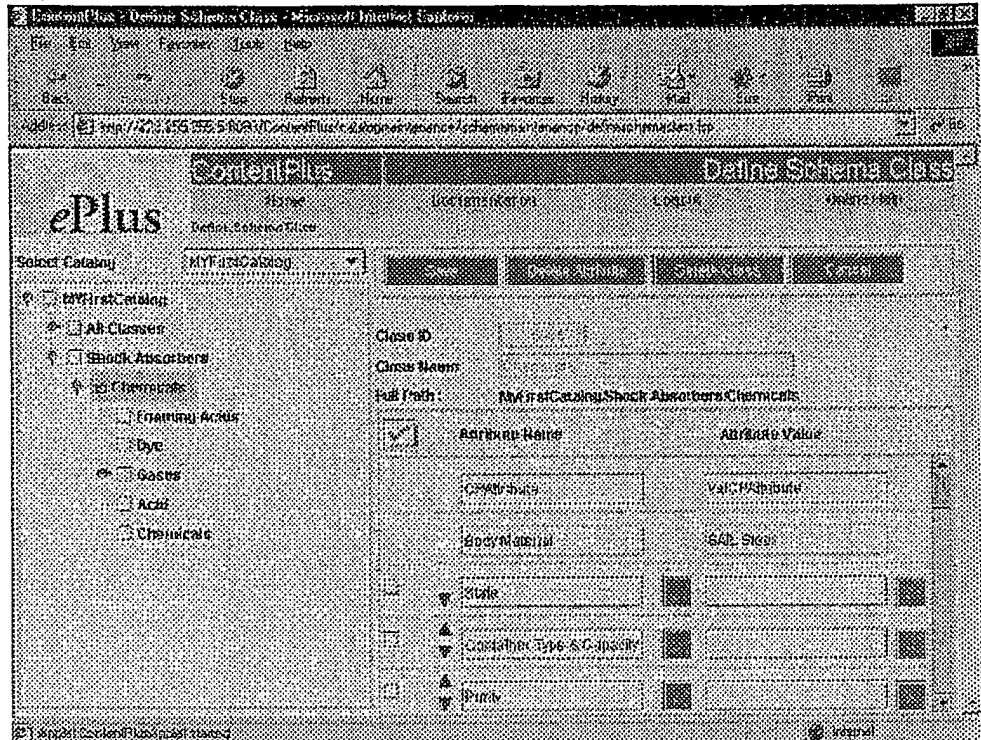
MyFirstCatalog

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14. Right-click on the target class, and select **Paste** option from the right-click menu. The message "Item under the selected class and all it's subclasses will be copied" will appear. Click on **OK** button to clear the message. The selected class will be moved under the target class.



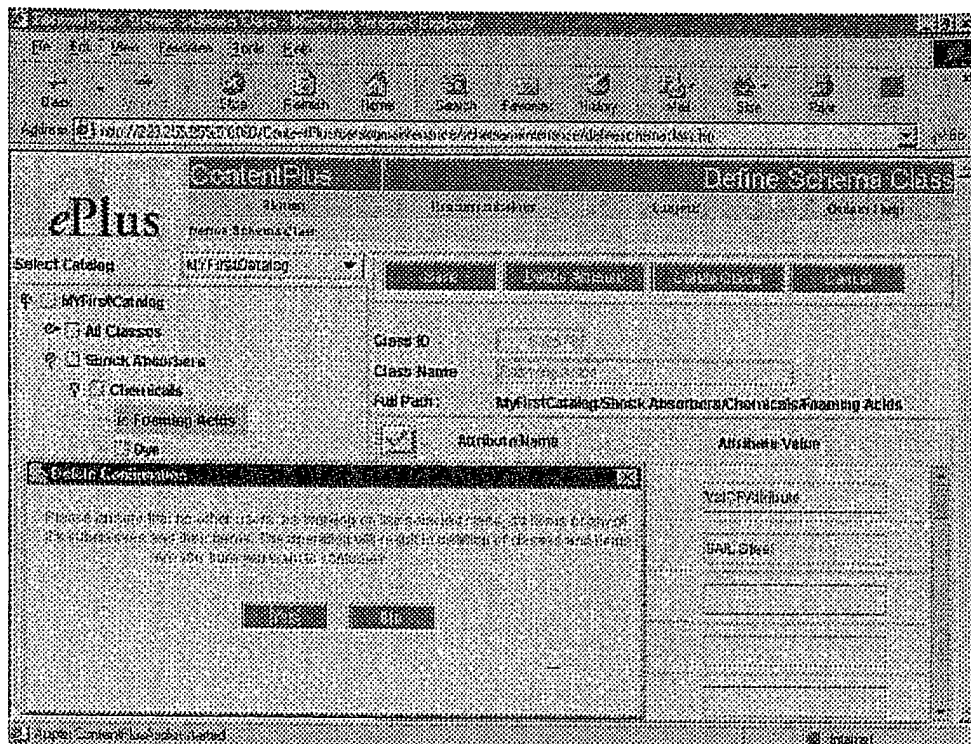
4.2

Delete Class

1. Select the class to be deleted, and click on the **Delete Class** button. The message "Please ensure that no other users are working on the selected class, it's items or any of its subclasses and their items. The operation will result in deletion of classes and items. Are you sure you want to continue." will appear.

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2. Click on **Yes** button to delete the class. The message "The selected class has been successfully deleted" will appear. Click on **OK** button to clear the message. Click on **No** to cancel the delete operation.
3. In case, the class attributes need to be deleted, select the check box for the respective attribute and click on the **Delete Attribute** button. The message "The selected class attributes have been deleted" will appear. Click on **OK** button to clear the message. The selected attributes will be deleted from the respective class.

ContentPlus - Schema Management User's Guide

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ContentPlus - Define Schema Class - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Address: http://223.275.255.5:8080/ContentPlus/SchemaManagement/defineSchemaClass.do

ePlus Define Schema Class

Select Catalog: MYFirstCatalog

MYFirstCatalog

Ad Classes

Shock Absorbers

Chemicals

Dye

Gases

Acids

Chemicals

Class ID: 1000

Class Name: Shock Absorbers

Full Path: MYFirstCatalogShock AbsorbersChemicals

Attribute Name	Attribute Value
C-Part Name	ValSPABShock
Sub Material	SAH Shock
State	
Container Type & Capacity	
Purity	

Super ContentPlus has started

Internet

APPENDIX VII – TEMPLATE FOR PROPOSAL FOR A CONTENT SOLUTION

APPENDIX VII TEMPLATE FOR

**Proposal for a
Content Solution to
<Customer Name>**

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Volume I: Executive Summary

Delivering ePurchasing Value

HOST Systems realizes that modern technology implementations encompass much more than just Technology – they encompass people. Technology fails when it is arduous to implement and difficult to use. Supporting this philosophy, we will work with <Customer Name> to identify viable options to ensure a smooth transition of content from limited description legacy data to feature-rich content. We are committed to cultivating a deep understanding of your business needs both today and moving forward, and we take pride in tirelessly working to deliver the most robust content solution available today.

Content That Meets Your eCommerce Expectations

Without accurate content, eCommerce is like looking for a needle in a haystack. The mission of our content team is to collect, enhance, maintain, and publish rich content for our clients in a structured format. Our solutions let you find what you need -- every time -- with optimal results. Companies that have embraced eCommerce strategies have found that one of the most critical components to their success is the quality of the content on the site. If users cannot find the items they need quickly and efficiently, they will stop using the site.

“Quality of content directly impacts whether the buyer enterprise will realize return on investment in its eProcurement program. If content is of poor quality, end-users will tend to not use the eProcurement system and resort to maverick (i.e., off-contract) spending. Thus, all price discounts and other cost of ownership benefits are lost.”

Granada Research Technology Report

HOST Systems Common Language Generator translates legacy product descriptions into rich, eCommerce content. By leveraging this technology, *HOST* Systems can use pattern recognition to identify attributes and produce standardized values that eliminate duplicate and inconsistent information. This structured data improves productivity by letting end-users quickly and easily find the items they're looking for.

HOST Systems knowledge base includes over 200,000 patterns covering more than 44,000 families of goods and services. Because the content factory generates data in a highly structured format, it can be used to load any database (Oracle, Sybase, DB2, Access, etc.) or any spreadsheet (such as Excel), as well as outputting XML.

The data cleansing process combines project management, data analysis, and data rationalization technology to help *HOST* Systems clients maximize the integrity of their data for use in eCommerce systems.

HOST Systems also offers the world's most effective resource for capturing and publishing data and images for both eCommerce catalogs and custom printed catalogs. This includes access to a comprehensive database of manufacturer parts, images and usage tables. Our Content solution will provide the feature-rich content <Customer Name> needs to make its eCommerce initiatives successful.

The Critical Need for Rich Content

The “best” data for Internet eCommerce includes both *rich* descriptive, intuitive content and manufacturers' technical descriptive information. However, you can have all of the rich content in the world and you may still fail if the shopper cannot find his item. *HOST* has developed a unique

solution to ensure incredibly high hit ratios while minimizing the “clicks” required in finding data. Our solution will provide your company with the following advantages:

- Data can be used throughout the production, accounting, customer service and marketing functions of the enterprise.
- Supports industry norms for categorizing, searching, purchase orders descriptions, and design descriptions. (Data and images together provide intuitive transaction support so users will see a familiar description and image.)
- Linked to supporting information (such as images, usage tables, MSDS sheets, etc.).
- Linked supporting information supports electronic and printed publishing.
- Content is formatted and updated to meet industry and Market Place standards (ROSETTANET, cXML, XML, etc.).
- Content can be published and managed in-house or via service bureaus, depending on owner’s skills and resources.
- Content is easily accessible by owner.
- Advanced text-based and/or parametrically searchable.
- Data cross-referencing using UNSPSC, UPC and other standards.
- Data can be used for both print and electronic publication.

Product Content is the core of any eBusiness. How you manage that content is a key factor driving the success—or failure.

HOST's Common Language Generator (Technology and Services) takes the data and images that are generated and normalizes the product descriptions and information into rich, eCommerce content while allowing you to maintain your *Brand Recognition*. By leveraging technology and services, *HOST's* content solutions can quickly bring your products to any market.

Content Conversion

Using *HOST* Content Systems unique Common Language Generator technology, content is transformed from legacy data to rich eCommerce data. Following are examples of the difference between these two types of data:

Legacy data is often confusing and un-useful as illustrated below:

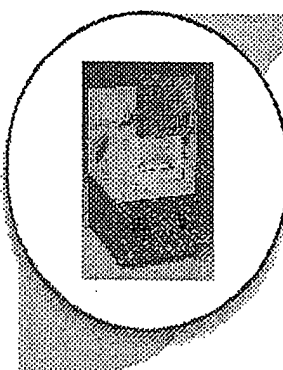
Product Number	Product Description	Vendor Catalog Number	Vendor Business Name	Commodity Code Primary Description	Commodity Code Secondary Description	Commodity Code Tertiary Description
1050565	MUFFLE FURN 1275X675X102DRV	FD036CM	BARNSTEAD THERMOLYNE CORPORATION	EQUIPMENT	CONSTANT TEMPERATURE	FURNACES

This cleansed catalog item can now be viewed with rich content descriptions and is fully searchable for easy ordering and procurement.

MarketPlace Catalog

HOST [MarketPlace](#) • [Lab & Medical Products](#) • [Lab & Research Equipment & Supplies](#) • [Furnaces](#) • [Muffle](#) • [Thermolyne](#) • Thermolyne Heavy-Duty Benchtop Muffle Furnaces

Product Information



Product Description

↳ Thermolyne Heavy-Duty Benchtop Muffle Furnaces, Model, 4-Step Programmable

FEATURES

Thermolyne Heavy-Duty Benchtop Muffle Furnaces, Compact heavy-duty benchtop furnaces have embedded heating elements on four sides that provide fast heatup with minimum gradient. Ceramic fiber insulation surrounds chamber, reducing heat loss. Counterweighted door opens up and out, keeping hot side away from user. Door is surrounded by durable firebrick insulation and contains a safety switch that deactivates heating elements when door is opened.

Two controller types are available: one that provides automatic single-setpoint control, and a programmable model that features four settings—two ramps to vary heat-up rate and two dwell cycles to hold temperature at set levels from 0.1 to 999.9 minutes. "Holdback" feature "holds" program until furnace temperature heats up or cools down to preprogrammed parameters—program will never outrun furnace performance.

All models feature LED display that simultaneously shows both setpoint and actual furnace temperatures in either °C or °F; overtemperature protection at a user-selectable temperature; open thermocouple protection; and adjustable power output from 1 to 100%. Operating range is 100° to 1200°C (212° to 2192°F). All models are supplied with a Platinum II thermocouple and a ceramic hearth plate to protect the bottom heating element. Note: Three-wire cord and plug not supplied. Contact your Fisher Customer Service Center for ordering information.



Ordering Information: Capacity: 0.08 cu. ft. (0.002m³). Chamber: 9D x 4W x 3 3/4 in H (23 x 10 x 9.5cm). Overall (door open): 18L x 11W x 25 in.H (46 x 28 x 63.5cm). Shipping weight, 52 lb. (24kg). 2240w.

Model	4-Step Programmable
Voltage	120V 50/60Hz
Manufacturer Name	Barnstead Thermolyne Corp.
Manufacturer Part Number	FD1545M
Price	\$1,802.97
Product ID	831192

Why choose *HOST* Systems?

HOST Systems is an undisputed eProcurement leader with a 10-year history of providing content, technology, and value added services to our customers. It's no surprise that we have been described by Granada Research as one of the "grand-daddies" of the data normalization businesses. *HOST* Content Systems is one of the few service providers that has deep experience and tools in data conversion, and can efficiently create aggregated supplier catalogs using the buying enterprises'

existing legacy systems and data, suppliers systems, as well as augmenting this data with its own product databases.

HOST Content Systems has processed millions and millions of items, offers full text-based and parametric searching abilities, and has the most complete, patented software technology working in over 100 production sites every day. Our advanced content capabilities can save <Customer Name> millions of dollars per year by preparing your catalog content for eCommerce, reducing inventory, improving business processes, and streamlining your material management processes.

HOST Content Systems has millions of discrete items in our knowledge base including over 200,000 patterns covering more than 44,000 families of goods and services.





MarketPlace Catalog



Graph 111

MarketPlace > Lab & Medical Products > Fisher Safety Products > Spectacles > 7000 UFO Mercury Spectacles Black Frame

(4 Products)

Item Number	Qty	TP	Description	Price	Unit	Lens Type	Manufacturer Part Number
1  920492	<input type="text"/>	Add	Glasses Black Frame	\$2.05	EA / 1	Clear	70MB-000
2  1030997	<input type="text"/>	Add	Eye Protection Spectacles Black Frame	\$96.11	PK / 12	Gray	70MB-002
3  1030999	<input type="text"/>	Add	Eye Protection Spectacles Black Frame	\$107.11	PK / 12	Mirror	70MB-040
4  1036570	<input type="text"/>	Add	7000 UFO Mercury Spectacles Black Frame	\$96.11	PK / 12	Amber	70MB-003

Common Features

Frame Color	Black Frame
Manufacturer Name	HL Bouton Co., Inc.

Common Features

Don't see what you need?

Request Quote For
Non-Catalog Item

solution that will not only simplify your data scrubbing function, but also create maximized value and a significant and identifiable return on investment.

We hope you agree that *HOST* Content Systems, Services and Solutions is well positioned to help <Customer Name> exceed its evolving eCommerce objectives. Our knowledge and leadership in eCommerce in general and data conversion specifically ensure the success of your project. Our methodology provides you the basis for data to be delivered to you on time, within budget and with the quality that you need in order to be successful in eCommerce.

Volume II: Technical Response

Our *Unique* Content Value Proposition

The Content Solution

The Content Solution is a robust toolset and a process for building custom eCommerce catalogs, developed and used within the HOST Content Transformation Center (CTC). HOST offers this customized toolset combining the proven technology and processes used today in our Houston facilities. This toolset is designed to allow the aggregation of electronic data and images, into a structured catalog format. This will allow the user to define the catalog structure and attributes associated with the different commodities, and maintain the catalog from the highest level of commodities classification to the individual product level. The Content Platform will provide the features and functionality as described below:

Components / Modules

- Scottsdale – The Content Platform
- DB - mapping module for compliant suppliers and for non-compliant suppliers who just point the data to us and we pick it up, a separate module.
- Data Mapper: For XML output to Format
- Auto Load Utility: Allows Importation of Structured, Classified databases
- CLG - Common Language Generator
- CMU - Allows editing of products and Images, Adds, Deletes
- CLU - Load utility to import supplier files
- Content Portal - Syndication tool

Functions

- Delta Analysis, tracks changes to products
- Content Editing Tools, Spell Checker, Proper Case Module: Sets Character Case
- Security Module – Based on Logins system to determine what kind of interface to present to user
- Reports for Management, production by user
- Status Tracker, cycle stage
- Error Log / Event Viewer
- Job Scheduler: for modules that can be scheduled to run as jobs
- Job Notify: On success or Failure of jobs scheduled

Scottsdale - The Content Platform

- Open scalable platform allows integration to existing legacy systems and applications (SAP, Empact, etc)
- Sequel Database Design
- 113 fields of product information. 60 fields can be user defined
- Search engine.
- Shopping Cart
- Users can administer views and pricing by group and product views
- Multi tier pricing
- Pricing by quantity
- Promotional pricing
- Images, Streaming Media, drawings, MSDS, PDF, JPEG, GIF
- Full Marketing descriptions and Short (254 char) technical description
- Supports cross-selling
- Supports XML

MarketPlace Catalog



Price View Place Handling & Storage Lifting/Loading Equipment Fork Lifts Hydraulic Lift Trucks

				Description	Price	Unit	Style	Size	Manufacturer Name	Manufacturer Part Number	
1				1 Tables, Stackers, Manually Operated Lifts, 66 inch X 36 inch W X 38 inch L 3 1/4 inch Lowered Height 100 lb Cap	\$207.50	EA / 1	Manually Operated	66 inch H X 26 inch W X 38 inch L	Presto	M152	1
2				1 Tables, Stackers, Manually Operated Lifts, 82 inch X 36 inch W X 38 inch L 3 1/4 inch Lowered Height 100 lb Cap	\$284.93	EA / 1	Manually Operated	80 inch H X 26 inch W X 38 inch L	Presto	M166	2
3				1 Tables, Stackers, Manually Operated Lifts, 92 inch X 36 inch W X 38 inch L 3 1/4 inch Lowered Height 100 lb Cap	\$270.31	EA / 1	Manually Operated	92 inch H X 26 inch W X 38 inch L	Presto	M178	3
4				1 Tables, Stackers, Manually Operated Lifts, 66 inch X 32 inch W X 49 inch L 3 1/4 inch Lowered Height 100 lb Cap	\$231.50	EA / 1	Manually Operated	66 inch H X 32 inch W X 49 inch L	Presto	M452	4
5		247799	ADD	Lift Tables, Stackers, Manually Operated Lifts, 80 inch H X 32 inch W X 49 inch L 3 1/4 inch Lowered Height 100 lb Cap	\$1,099.43	EA / 1	Manually Operated	80 inch H X 32 inch W X 49 inch L	Presto	M456	5
6		247820	ADD	Lift Tables, Stackers, Manually Operated Lifts, 92 inch H X 32 inch W X 49 inch L 3 1/4 inch Lowered Height 100 lb Cap	\$1,086.75	EA / 1	Manually Operated	92 inch H X 32 inch W X 49 inch L	Presto	M478	6
7		221072	ADD	Lift Tables, Stackers, Hydraulic Pump Pedals, 34 inch Lift Height 22 inch X 22 inch Platform 750 lb Capacity 162 lbs	\$332.21	EA / 1	Pedals		Weeco	DPL-54-2722	7

The *HOST* Systems Advantage (CLG)

HOST Systems unique content management conversion technology, The **Common Language Generator (CLG)**, translates legacy product descriptions into easily understood formats for our *HOST* Systems customers. By leveraging this technology, *HOST* Systems can use pattern recognition technologies to identify attributes and produce standardized values incorporating your business rules and eliminating duplicate and inconsistent information. This structured data improves productivity by letting end-users quickly and easily find the items they're looking for and reduce the "frustrated shopper syndrome".

Because the CLG generates data in a highly structured format, it can be used to load any database (Oracle, Sybase, DB2, Access, etc.) or any spreadsheet (such as Excel), as well as XML. The data cleansing process combines project management, data analysis, and data rationalization technology to help *HOST* Systems clients maximize the integrity of their data for use in eCommerce systems. <Customer Name> investment is also protected by the use of our technology since the patterns that are added to the *Common Language Generator* are reusable and may make future updates and additions more efficient.

As pioneers and leaders in the field of electronic content, *HOST* Content Systems offers industry-leading technology and a client-focused approach to our relationships. Our long history and proven record of delivering advanced eCatalog solutions illustrate the value we can bring to <Customer Name>.

Our functionally-rich technology and project management and implementation services enable us to deliver a customized solution that can help <Customer Name> streamline data cleansing from all manufacturers with one comprehensive solution, while significantly reducing costs.

HOST Content Systems 's Content Transformation Center (CTC) has the expertise and technology to cost-effectively help migrate <Customer Name> from legacy data to an advanced easy-to-use eCatalog. By working closely with <Customer Name>, we can identify the most cost-effective ways to meet all your data needs. We can deliver value both by enhancing existing technologies with industry-leading capabilities such as our Common Language Generator.

The advantages of *HOST* Systems Content Services solution are significant and clear, based on the following:

- Will quickly and efficiently transform your legacy data into eCommerce-ready data;
- Ensure that customers can find each item;
- Enable <Customer Name> to participate in any eCommerce engagement with the quality of data required to ensure customer ordering.

eCommerce requires rich eCatalog content management to succeed. *HOST* Systems has the proven technology and the rich eCatalog content required to succeed in eCommerce.

The *HOST* Content Systems Common Language Generator (CLG)

Historically, data has been cleaned or 'rationalized' manually—often an expensive and labor-intensive venture. It requires highly trained materials experts that examine product data line by line. This technique is exceedingly time consuming, expensive, and produces inconsistent results due to human error.

HOST Systems unique Common Language Generator (CLG) technology reduces the time and high cost of traditional data cleaning. CLG captures the knowledge of material experts in a Knowledge Base so that data rationalization becomes a repeatable process supported by the Knowledge Base instead of an individual. CLG generates consistent, structured, and accurate data in a more efficient and cost effective manner than a manual process.

Using the Knowledge Base, CLG translates existing material descriptions, with all their inconsistencies, into one standard description format. Through this automation, CLG improves the productivity and accuracy of standardizing free-form text items. It uses pattern recognition to identify attributes and produce standardized format values. CLG is context sensitive for each class of items, and can dynamically adjust its pattern recognition to each material description's content.

The following are two descriptions for a gate valve from a supplier's system:

- **BRZ 125# SWT NRS GATE VLV ABC VALVES 5552- 2-IN EA C5552H PR BRZ**
- **BRZ 125LB THRD NRS GT VALVE ABC VALVES 6312- 1/4 IN EA C6312 PR BRZ.**

Without a key or some sort of material knowledge it is extremely difficult for a first time user to understand the meaning of this data. This is not the type of data that a supplier would choose to put in front of a customer.

In addition, inconsistencies can be found between the descriptions of the first and second items. In the first item, the ANSI pound rating is referred to as "125#" but in the second item, the rating is "125lb". A user searching for the string "125lb" would not get a hit on "125#" even though both items would fit their requirements.

For this item, the rules are built in a category set for "VALVE: GATE". When CLG first analyzes the data it looks for a category match. In this case it would find "Gate Vlv" and "Gt Valve" and compare this to the Knowledge Base. If those text strings had been previously built for the gate valve category then CLG would analyze the attributes under GATE VALVE and compare them to the description for matches.

In cases where CLG finds a match against more than one category, it utilizes material intelligence to determine the best match. For instance, CLG may examine a line and recognize the word "Washer". It finds three categories that use "washer" as a heading; a fastener component, a clothing washer, and a liquid cleanser. By analyzing the rest of the data surrounding the word, CLG recognizes three attributes that match the category for clothing washer, but only one attribute for the others. It therefore determines that the item is a clothing washer. To date, the CLG Knowledge Base correctly identifies items over 90% of the time.

Once CLG determines a product's category, the rules for that category are invoked to identify the attributes that identify the item. Below are several examples of the rules that have been created for the "VALVE: GATE" category that would fire against the line items shown earlier in this section:

"BRZ" = "BRONZE"

Any number preceding "#" or "LB" = ANSI Pound Rating

Any number preceding "IN" = Pipe Size

The final output would look similar to this:

	LINE 1	LINE 2
CATEGORY:	VALVE	VALVE
QUALIFIER:	GATE	GATE
PIPE SIZE:	2 INCH	1/4 INCH
ANSI LB RATING:	125 POUND	125 POUND
END CONNECTIONS:	SWEAT	THREADED
CLOSURE	NON-RISING STEM	NON-RISING STEM
BODY MATERIAL:	BRONZE	BRONZE
UNIT OF MEASURE	EACH	EACH
MANUFACTURER NAME:	ABC VALVES	ABC VALVES
MANUFACTURER PART NUMBER:	5552	6312

The result is much easier for an end-user to read and is consistent from one item to the next. Once these patterns are built, they then fire against any record that is defined as a Gate Valve. The process becomes very automated and saves data personnel the hassle of re-keying the item by hand. Not only are the results easier to read for the end user but also they enable the customer to search parametrically or by advanced text. By clicking on a category of Valve, for example, the user would be presented with a series of drop down boxes that contain *only the valid choices* for the attribute. This keeps the customer from making keystroke errors and quickly narrows the search to the product that best fits the customer's need.

The CLG Knowledge Base

To date, the CLG Knowledge Base contains over 200,000 patterns across 44,000 families of goods and services. This represents over 1.5 million distinct items. Users can easily add new vocabulary and grammar to the Knowledge Base for new valid values, synonyms, misspellings and abbreviations in their own data. Once the material experts' knowledge has been captured in patterns (rules), CLG can process up to 100,000 material descriptions per hour.

Most importantly, *HOST* Systems CLG technology transforms legacy data to user-friendly information, as shown in the following examples:

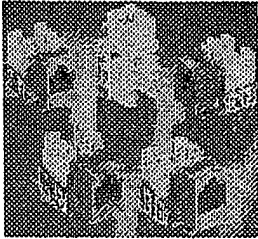
Legacy Input

Supplier Part Number	Manufacturer	Manufacturer Part Number	Category1	Noun	Modifier	Char 1	Val 1
78909195325	AMP	406372-2	Data communications	CONNECTOR	COMMUNICATIONS	TYPE	JACK MODULAR
Char 2	Val 2	Char 3	Val 3	Char 4	Val 4	Char 5	Val 5

CONDUCTOR	26-20AWG SOL/STR	POSITION	8	COLOR	BLACK	ADDITIONAL DETAIL	ENHANCED CATEGORY 5 RJ45 UNIVERSAL 110 F/ T568A & T568B WIRING SCHEMES
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HOST Output

Product Information



Product Description

→ 110 Modular Jack Assembly, RJ45, Universal, Category 5, Modular Plugs and Jacks, Cable Mounted Jacks, Brand: AMP, F/ T568A & T568B Wiring Schemes, Package Quantity: 1

FEATURES

110 Modular Jack Assembly, RJ45, Universal, Category 5, Modular Plug and Jacks, Cable Mounted Jacks, Brand: AMP, Product Type: Jack, Jack Type: 110 Connect, No. of Positions: 8, Wiring Pattern: Universal, Termination Style: 110 style punch-down, NETCONNECT Select System: Yes, Keypad: No, Shielded: No, Performance Category: Enhanced Cat 5, Housing Color: Black, Packaging Method: Poly Bag, Packaging Quantity: 1, Housing Material: Polyphenylene Oxide, Housing Flammability Rating: UL 94V-0, Contact Material: Phosphor Bronze, Contact Mating Area Plating: Gold (30) over Nickel, Contact Termination Area Plating: Tin-lead over Nickel, Wire Range (Solid) (mm (AWG)): 22 - 26 AWG, Wire Range (Stranded) (mm (AWG)): 20 - 26 AWG, 110 Block Material: Polycarbonate, Comment: T568A and T568B wiring patterns combined in one P/N.

Type :	Category 5
Conductors :	8 Wire
Color :	Black
Manufacturer Name :	Amp
Manufacturer Part Number :	4363723
Price :	\$0.01
Product ID :	1034179

CLG Client Server Technology

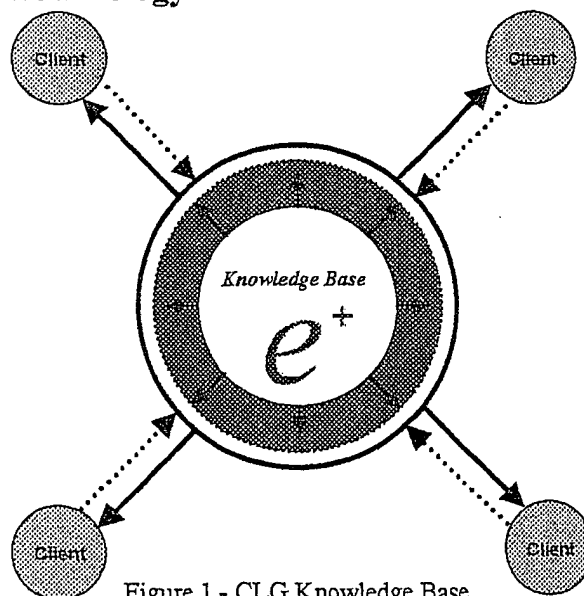


Figure 1 - CLG Knowledge Base

As customers data is input to the CLG process they will continue to add patterns for their specific product lines (represented by solid lines in Figure 1 above), it will continue to grow (shown by the short dashed lines in Figure 1). The Knowledge Base continues to grow through the use of each client becoming "smarter" and more valuable over time. As each new pattern is built and disseminated, the system becomes more and more automated to the point where very little intervention or new patterns are necessary to complete a data-cleaning project.

As patterns are added to the CLG, the data cleansing process becomes more efficient for similar data. The increases in efficiency protect client investment in upgrading their content and ensures that costs of enriching the data are declining costs.

Common Data Standards

The passing of information between supplier and buyer is not a new practice. Many attempts have been made to provide standards that all businesses can use in the normal course of operations. These standards, however, help to automate the transactions but *do not define the attributes that constitute the supplier's product*. Below are several of the better-known standards that illustrate this problem.

EDI ANSI X.12

One of the earliest and most widely used standards is Electronic Data Interchange (EDI). The American National Standards Institute (ANSI) published an EDI standard, which has been adopted by most EDI vendors. This standard is called X12. (Another widely adopted EDI standard more frequently used in Europe is EDIFACT.) While ANSI X12 specifies the standard format for such business documents as Purchase Order, Request for Quote, and Advanced Shipping Notice, it does not attempt to provide a standard for the item attributes. With regard to product information, it provides only certain fixed-length fields to describe a product. Suppliers are therefore forced to define even their most complex products using a small data field.

Open Buying on the Internet (OBI)

With the widespread availability of the Internet, electronic commerce initiatives have begun to proliferate. In response, Internet related standards have grown up seemingly overnight. These standards are, in many cases, similar to their EDI predecessors because they define the transactions but not the item data. One of the most widely discussed is Open Buying on the Internet or OBI. Although OBI has the potential to facilitate business-to-business commerce on the Internet, it requires the use of EDI-standard documents to conduct some types of information exchange, such as purchase orders. And like EDI, OBI defines only the high-level information rules that are consistent across all transactions.

United Nations Standard Product and Service Classification (UN/SPSC)

The UN/SPSC standard provides for the description of products and services using a ten-digit code. It is structured as a hierarchy of five levels: Segment, Family, Class, Commodity, and Business Functions. At each level, a two-character numerical value is assigned. Rules for classification specify that items should be aggregated with others that have the same function or that are manufactured by the same process. If those two criteria cannot be met, then the material from which the item is made serves as the basis for classification.

Although this standard provides for the classification of products, it does not differentiate among the many attributes that a classified product might have. Thus, a ballpoint pen is only a ballpoint pen to the UN/SPSC; it does not have red ink, black ink, a retractable tip, or even a specific manufacturer.

Extensible Markup Language (XML)

XML, a specification spearheaded by the World Wide Web Consortium (W3C), is really a system for defining other languages that describe specific types of data. The W3C says XML is "a common

syntax for expressing *structure* in data.” Structured data is tagged according to its content. This differs from HTML, which is syntax for expressing the *format* of data. In HTML, data is tagged as to how it should be displayed by your Web browser-- for bold, <I> for italics, etc. In XML, data would be tagged with something that gives it meaning—for example, <list price> for the list price of an item, or <manufacturer> for the name of the company that makes the product. XML provides the framework that enables a supplier to create attribute/value pairs for each product in its catalog. To date, the benefits of XML have been unrealized by eCommerce companies, which have only utilized XML to define the highest level of information exchange. Product-specific data has been largely ignored, because no one has yet presented a mechanism to define products consistently by attributes - until now.

XML with CLG Extensions

As XML has developed, the standards bodies that oversee its development believe that unique formats in the form of a Document Type Definitions (DTD) are necessary for each classification of products. This has lead many eCommerce companies to develop DTDs that define their unique format that the XML will take for their applications and with the products they support.

While CLG can support any of these eCommerce DTD's, we believe that a simpler, more effective, single DTD can be created to handle *all* products in *all* classes. In addition to having XML elements for information such as “Part Number” and “Description”, the DTD should contain an unlimited

number of element pairs that contain the attributes and corresponding values to describe each item's unique characteristics.

The hurdle to overcome in order to make XML viable is not in the creation of the DTD but in the definition of these attribute/value pairs. CLG is designed to accomplish this. As described earlier in this document, CLG generates this unique attribute value pairing automatically and exports an XML file.

Our CLG Technology Brings Results

Without translating product data into a language that a buyer can readily understand, a supplier's eCommerce initiative will ultimately fail, no matter how much money is spent on the “look and feel”.

In addition, as more and more corporations move to application driven purchasing, suppliers will be faced with more and more requests for product data in a wide variety of formats from a growing number of purchasing application vendors. Suppliers can no longer create a new project for each new request. They must have some way to clean their data *once* and use it for all of the requests from these vendors. This data must be clean, consistent and flexible.

HOST Systems CLG provides the language for eCommerce and therefore provides a solution for all of these issues. CLG creates data that can be utilized by <Customer Name> in a variety of ways.

- To create parametric searching for <Customer Name> eCatalog.
- To allow <Customer Name> to enable feature rich product listings in any eCommerce engagement.
- To create XML tagged data when required—this is now the emerging industry standard.
- To create better internal customer service applications that are easier to learn

-
- and use.
 - Standardizing data reduces errors, cuts costs and increases customer satisfaction throughout the enterprise.

Our Unique History in Delivering Content for Business

HOST has a long proven track record in the field of eContent for eCommerce. The tools and processes we employ to build catalogs are derived from a long-standing collaboration of people with materials expertise working closely with technology people. That's the advantage we enjoy, and we feel our tools serve the needs of the people working in the process, not defining the process. Following you will find descriptions of the tools we now use in our content creation and management processes:

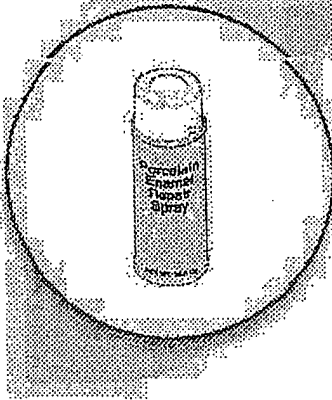
Catalog Maintenance Utility:

- Users may add, delete or update products, Images and pricing.
- View and maintenance products in their native (WEB) setting.
- Includes catalog management features of the CLG, maintain Classes and attributes.

Catalog Maintenance

PNet Demo > Paint and Protective Coatings > Paints > Appliance Touch-Up Paints

Product Information



Main Image File Upload

Browse...

Upload Main File

Thumbnail Image File Upload

Browse...

Upload Thumbnail File

Product Description

15.5 oz Appliance White Porcelain Enamel Repair Spray

FEATURES

15.5 oz Appliance White Porcelain Enamel Repair Spray -- Repairs Surface Discolorations & Minor Scratches

Type:	Evaporative Cooler	<input checked="" type="checkbox"/>	Porcelain Enamel
Container Type & Capacity:	8.5 oz	<input type="checkbox"/>	15.5 oz
Composition:		<input type="checkbox"/>	\$\$\$
Color:	Tan	<input type="checkbox"/>	White
Finish:	Gloss	<input type="checkbox"/>	\$\$\$
Brand Name:		<input type="checkbox"/>	\$\$\$
Manufacturer Name:	Dial Manufacturing Inc	<input type="checkbox"/>	\$\$\$
Manufacturer Model:		<input type="checkbox"/>	\$\$\$
Manufacturer Part Number:	5623	<input type="checkbox"/>	\$\$\$
Supplier Name:		<input type="checkbox"/>	Maintenance Warehouse
Supplier Part Number:		<input type="checkbox"/>	128718
Cost:	1479		
Product ID:	769272		
	<input type="button" value="Save"/>		

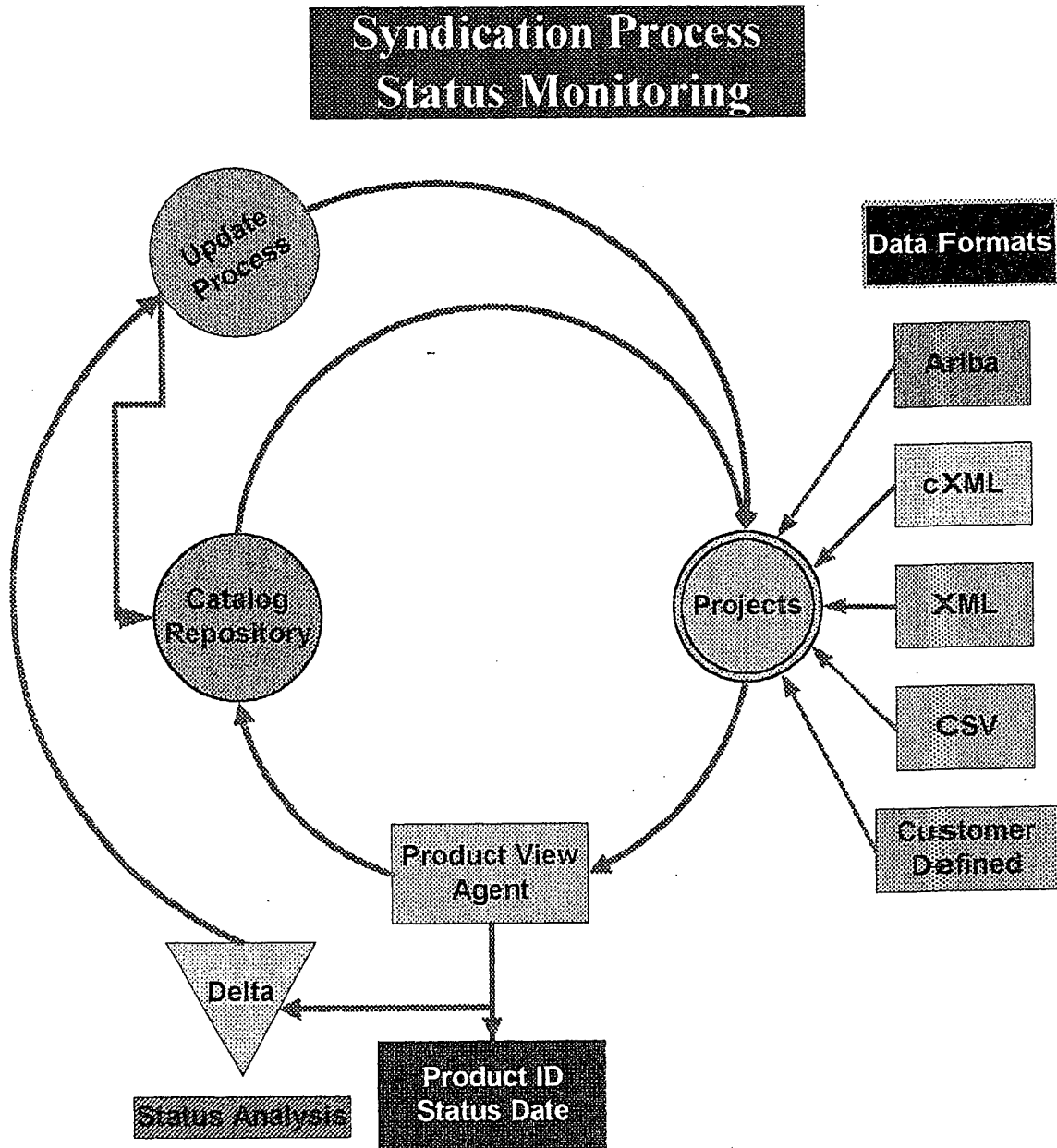
Catalog Load Utility:

- Loads supplier input files to Catalog Platform, user may assign products to catalog classification structure.

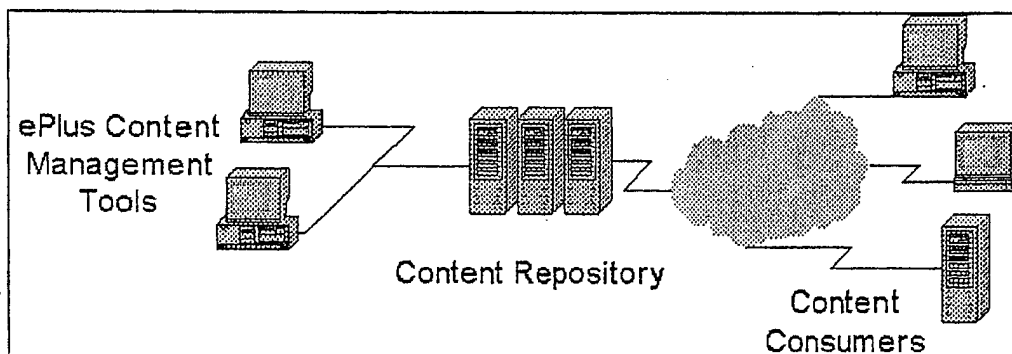
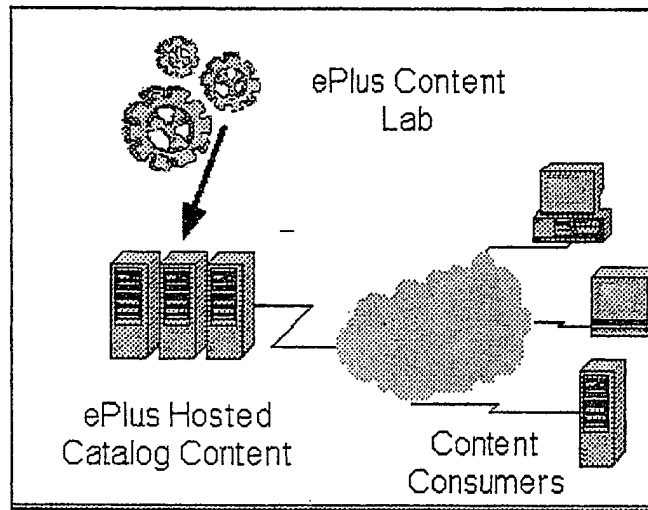
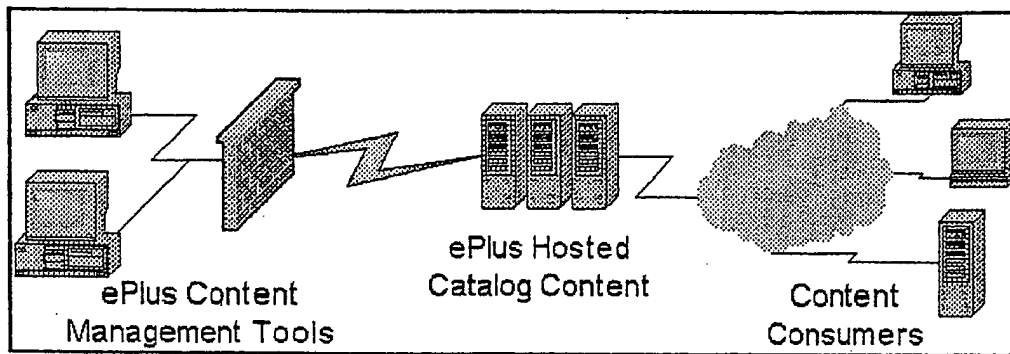
[illegible]

Syndication:

- Define products by Classes, User Groups or Product views and Publish to Multiple user defined formats
- Track Distribution and Changes
- Provides reports on New and Re moved products



Three Ways to Deal with Content



Services

Turn Key Content Solutions:

- HOST will work with the client to provide a complete *"End to End"* content solution, customized to fit the clients business requirements. We will employ all the resources and technology necessary to create and publish product content that fits the client's business needs.

Supplemental Services:

- HOST will supplement your existing resources to any level necessary to ensure the success of your content initiatives.

Ready to "GO" Content:

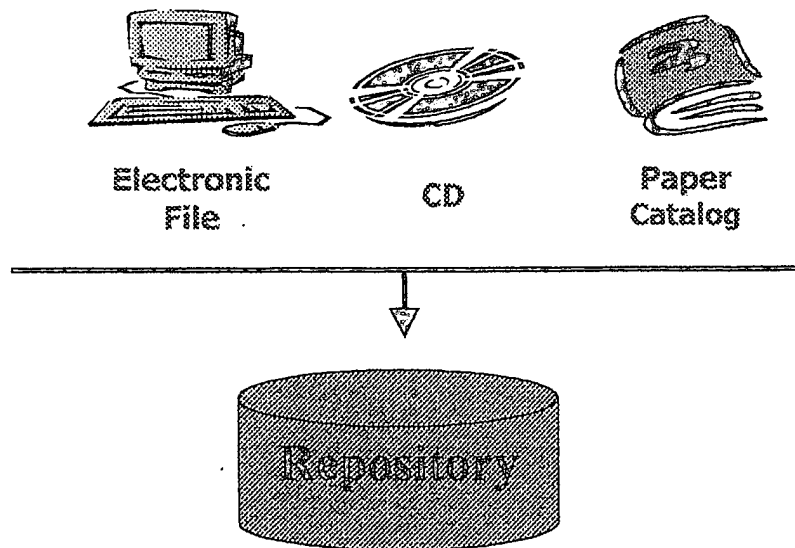
- Compare your product library to our 1 million-item Repository, and then reuse the work we have already performed and bring forth the most intuitive content possible at the lowest cost in the industry.
- Build your Marketplace offering from our repository and process orders immediately.

Catalog Hosting:

- 24/7 operations and support.
- Maintenance services on content and catalogs.
- Syndication at clients request to all formats XML, CSV, Ariba, C1, customized or printed catalogs and marketing literature.
- Client connectivity, for QA or Maintenance.

Aggregation Services:

- Contact Manufacturers and Supply sources to retrieve and capture all relevant product information including Descriptions, Images, drawings etc.
- Create data source for future updates and Maintenance of product descriptions.



The Optimum Solution for your Company

HOST's long history of providing Rich Content and Services to our clients has taught us the creation of a catalog involves a strong partnership between the client and our services organization. That's why our Services and Catalog Technology is the right tool set for you.

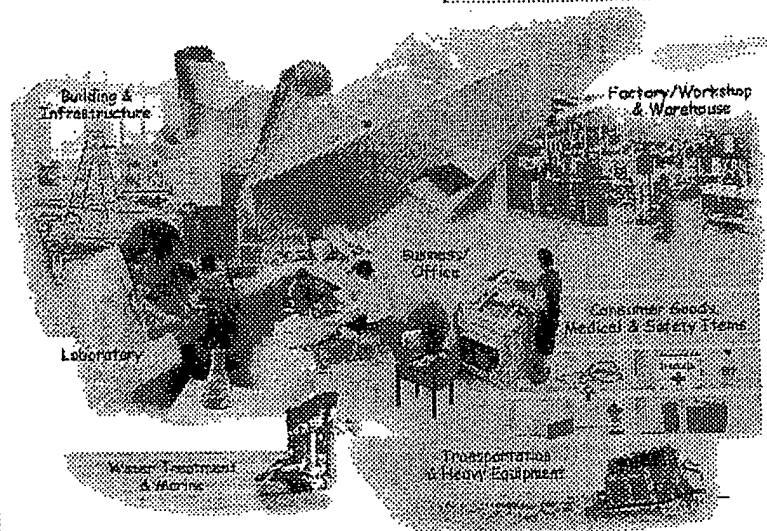
Our software allows the user to aggregate any commodity into an intuitive easily navigate-able catalog using business rules that are right for your business. We provide knowledgeable people with many years of industry experience to help your organization through the entire building process.

Search in Building Supplies for

Catalog

- ✱ Building Supplies (109811 items)
- ✱ Chemicals (13 items)
- ✱ Consumer Products (704 items)
- ✱ Electrical (22123 items)
- ✱ Electronics, Computers & Communication Equipment (16036 items)
- ✱ Facilities Maintenance (3617 items)
- ✱ Fire & Safety, First Aid (1840 items)
- ✱ Gaskets, Seals, & Packings (253 items)
- ✱ Handling & Storage (4698 items)
- ✱ Lab & Medical Products (95443 items)
- ✱ Office Products (12382 items)
- ✱ Paint & Protective Coatings (474 items)
- ✱ Pipes, Valves, Hoses, Tubing & Fittings (18077 items)
- ✱ Process Controls, Equipment & Instrumentation (412 items)
- ✱ Rotating Equipment & Machinery (24467 items)
- ✱ Rotating Equipment & Machinery (24467 items)
 - Air Compressors (48 items)
 - Air Compressors Accessories & Spare Parts (5 items)
 - Bearings (12693 items)
 - Bearings & Power Transmission Equipment (11340 items)
 - Electric Generators Accessories & Spare Parts (1 items)
 - Engine Electric Generators (3 items)
 - Mechanical Lockouts (3 items)
 - Pumps (24 items)
 - Pumps & Manual Operators (2 items)
 - Pumps & Motors (4 items)
 - Pumps Accessories & Spare Parts (16 items)
 - Rotating Equipment Accessories & Spare Parts (338 items)
- ✱ Text Based Supplier Catalogs (556278 items)

REFINE SEARCH



APPENDIX VIII – PRESS RELEASE OF 11/13/01

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ePlus Releases Content+™ Catalog Creation and Management Solution

Content+ is a Powerful Application for Catalog Development, Deployment, and Management For Virtually Any System or Application

HERNDON, VA - November 13, 2001- ePlus inc. (Nasdaq NM: PLUS - news), a leading provider of eContent and business solutions and services, today announced Content+™, a comprehensive suite of software and outsourced services for advanced electronic catalog content production and management.

Developed by ePlus' commodity experts through 8 years of real-world use with ePlus' online marketplaces and customers, this fourth generation of Content+™ enables organizations to automate the creation of their eCatalogs. Unlike many catalog management products, Content+™ programmatically cleanses and classifies raw commodity data, greatly accelerating the creation of enhanced, parametrically searchable catalogs that are required for efficient e-commerce transactions.

"Catalog managers will now be able to read a wide variety of raw content and catalog data-from parts and materials, to accounting records, customer support information, and more," said Ken Farber, President of ePlus Content Services. "Content+ automates the analysis, normalization, and rationalization of data to maximize its integrity for use in all eCommerce applications. We have competed successfully against market leaders like Requisite, and we believe that this product has great market potential now that it is generally available to the public."

Industry experts agree that without accurate content, eCommerce is like looking for a needle in a haystack. "Before it is usable in an eCatalog, catalog content needs to be cleansed, normalized and categorized," said Erica Rugulies, Director at Giga Information Group ["Choosing the Right B2B Catalog Management Solution," June 1, 2001].

Incorporating a knowledge base of over 200,000 business rules and 44,000 commodity and class codes, Content+ uses pattern recognition to interpret free-form text. By recognizing millions of permutations in data and producing standardized values that eliminate duplicate and inconsistent information, Content+ produces highly structured and normalized data elements. The lack of such catalogs has been one of the largest limiting factors in the adoption of e-commerce systems by customers and suppliers, and Content+ provides all of the tools to quickly and cost effectively create and manage online catalogs.

Unlike most competing products, Content+ programmatically cleanses data and classifies products into useable categories, and embedded business rules can be expanded to accommodate any type of incoming data. Customers can add their own rules and classes to reflect the specific needs of their business. The suite is available to suppliers, software solution providers, eProcurement customers, as well Enterprise Resource Planning (ERP) and Customer Relationship Management (CRM) vendors and their customers.

By using Content+, businesses can reduce the time and high cost of manually cleansing data while enabling a platform that can create easily navigable e-Commerce catalogs. The Content+ suite consists of integrated modules, including data cleansing, catalog management and maintenance, export/syndication, catalog hosting and aggregation services. Content+ is part of the ePlusSuite of industry solutions, covering every aspect of business process management - from procuring goods and services, to tracking financial data and managing corporate assets, to outsourcing, fulfillment, content technology, and related services.

More information about Content+ is available at www.eplus.com/content_plus/index.shtml.

About ePlus:

A leading provider of Web-based e-procurement, asset management, financing, leasing, sourcing, and eContent technology and services, ePlus delivers comprehensive and high-value business solutions. The ePlusSuite of products and services, including Procure+, Manage+, Finance+, Service+, Content+, and ePlusMarket, helps businesses dynamically streamline, improve and gain management control. ePlus solutions integrate and automate each aspect of the supply chain process: from requisition to

approval, fulfillment, financing and asset management, delivering the highest return on investment.

ePlus™, ePlusSuite™, Procure+™, Manage+™, Service+™, B14ZR™, OneSource™, OneReq™, CLG™ and MarketBuilder™ are trademarks of ePlus inc. Finance+SM is a registered service mark of ePlus inc. .

Founded in 1990, the company is headquartered in Herndon, VA and has more than 30 locations in the US. For more information, visit our website at www.eplus.com, call 800-827-5711 or email to info@eplus.com.

"Safe Harbor" Statement under the Private Securities Litigation Reform Act of 1995: The statements contained in this release, which are not historical facts, may be deemed to contain forward-looking statements. Actual and anticipated future results may vary due to the following risks and uncertainties, including, without limitation, general economic conditions; fluctuations in operating results; its ability to effectively manage future growth, to retain and efficiently integrate our executive management team, and to identify, hire, train and retain, in a highly competitive market, individuals highly skilled in the Internet and its rapidly changing technology; the lack of long-term contracts in certain business units; its ability to enter into and retain its existing, strategic relationships; market acceptance; rapid technological change; a decline in Internet usage and intense competition in its market; its ability to effectively integrate the operational, managerial and financial aspects of future acquisitions; demand and competition for the Company's lease financing and equipment sales and asset management services, and the products to be leased or sold by the Company; the continued availability to the Company of adequate financing including permanent non-recourse and recourse debt, and working capital lines of credit; the ability of the Company to recover its investment in equipment through remarketing; the successful execution of its e-commerce strategy; the amount of equipment ordered, purchased and/or leased by its customers; and other risks or uncertainties detailed in the Company's Securities and Exchange Commission filings. Investors are cautioned that current financial results may not be indicative of future results.

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ePlus Investor Relations
Tel: 703-709-1924

kparkhurst@eplus.com

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APPENDIX IX – PRESS RELEASE OF DECEMBER 4, 2001

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ePLUS ANNOUNCES FIRST e-COMMERCE CATALOG CONTENT FRAMEWORK

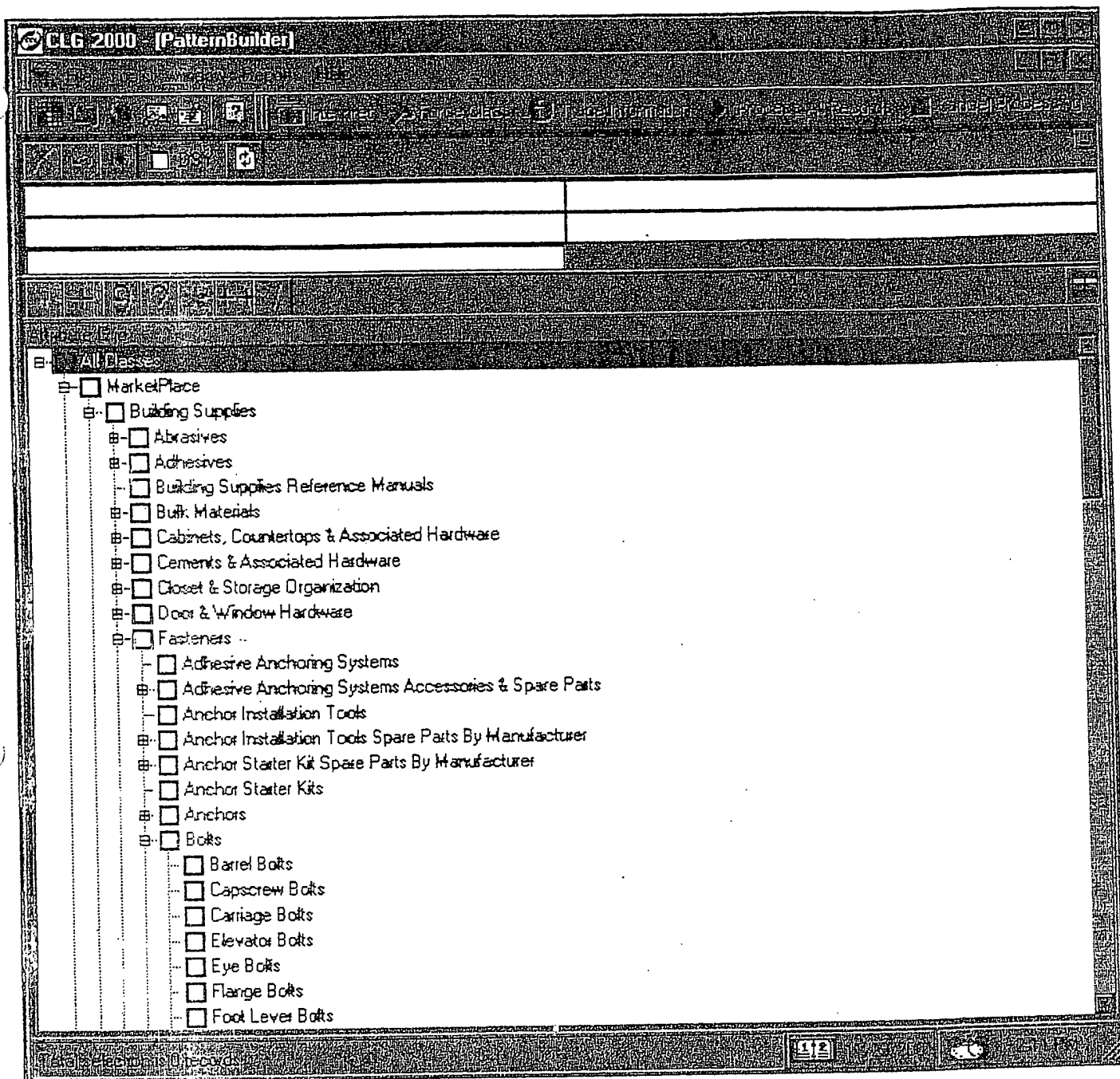
Accelerates Catalog Development and Deployment for Virtually Any System or Application

HERNDON, VA - December 4, 2001- ePlus inc. (Nasdaq NM: PLUS - news), a leading provider of eContent and eBusiness solutions and services, today announced the general availability of ePlus Content Framework SM, an open and fully extensible schema for the creation and management of eCommerce-enabled product catalogs. By adopting the ePlus Content Framework, any company can quickly create online catalogs organized around a user-friendly table of contents. The ePlus Content FrameworkSM contains over 44,000 pre-defined product classifications, and enables users to match their business requirements by adding to or modifying the existing structure.

ePlus developed the ePlus Content Framework by naming and creating product schemas from real-world experience. "Our extremely rich schema has been exceedingly well received by our customers and partners because of its success at representing products in natural language that all users, no matter what their level of expertise, can easily understand," said Ken Farber, President of ePlus Content Services. "Strong community encouragement and feedback led us to the decision to make this framework available to the broader eCommerce industry. We believe it will revolutionize eBusiness standards by facilitating a smooth and seamless content process for suppliers, manufacturers, third-party vendors and all types of businesses."

The flexibility of the ePlus Content Framework worked to the advantage of Integra Integrated Procurement Solutions, a national provider of maintenance, repair, and operating materials (MRO) as well as specialty products. "Integra wanted to give our customers access to our products using a unique schema we had developed internally," says Jake Fegely, Vice President of Merchandising for Integra. "The schema needed to cover products from thousands of suppliers and include potentially millions of items. Using the ePlus toolset accelerated the mapping of our catalog content in a way that meets our customers' needs and our business requirements at the same time."

Companies entering into eCommerce or converting their business to an enterprise software package need a framework to define their catalogs of products and services. The ePlus Content Framework is a cost effective solution for businesses of all sizes. Compared to internally developed solutions, which must be built from scratch, the ePlus Framework can be easily customized to fit proprietary and legacy data. In contrast, market alternatives that force businesses to adhere to rigid structures actually increase the cost and decrease the utility of those solutions.



The ePlus Content Framework provides a schema consisting of over 44,000 structured product classifications that facilitate the creation of user-friendly, intuitive, easy-to-navigate catalogs. ePlus Content classifications cover a wide range of commodities, attributes and coding to pinpoint and narrow the search for goods in a wide range of categories - from electrical and automotive equipment, to medical and hazardous material supplies, consumer goods, and more. An example of the product classifications available through the ePlus Content Framework is shown above. The schema simplifies complex product information to enable easy creation of digital catalogs. Along with related management software tools available from ePlus, organizations can cross-reference product data with common terminology and industry standards such as the UN/SPSC or any other pre-developed categorization scheme, ensuring standardized, reusable data.

Relationships between products and the type of domain they are commonly associated with typically are overlooked when building product classification schemas and helping search engines guide users to the products they seek. According to Pierre Mitchell, Research Principal, Enterprise Management Strategies at AMR Research, "Schemas and attributes must be intuitive to buyer[s], whether goods are off-the-shelf or configurable." [The AMR Research Report on E-Commerce Applications, "Content Management Strategies", May 2000]

For more information about the ePlus Content Framework, contact Rudy Alexander, Vice President Sales, at 704-357-3888 ext. 212.

About ePlus:

A leading provider of Web-based e-procurement, asset management, financing, leasing, sourcing, and eContent technology and services, ePlus delivers comprehensive and high-value business solutions. The ePlusSuite of products and services, including Procure+, Manage+, Finance+, Service+, Content+, and ePlusMarket, helps businesses dynamically streamline, improve and gain management control. ePlus solutions integrate and automate each aspect of the supply chain process: from requisition to approval, fulfillment, financing and asset management, delivering the highest return on investment.

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Founded in 1990, the company is headquartered in Herndon, VA and has more than 30 locations in the US. For more information, visit our website at www.eplus.com, call 800-827-5711 or email to info@eplus.com.

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